Avid Unity™ MediaNetwork

File Manager Setup Guide

make manage move | media™ Avid®

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Using This Guide

Congratulations on your purchase of an Avid Unity™ MediaNetwork workgroup. You can use your MediaNetwork workgroup to share media files and other project data among a maximum of 24 Fibre Channel attached clients and 60 Ethernet clients across 4 PortServer Pro systems.

For other possible Ethernet client configurations, contact Avid Technology Product Marketing.

See the release notes for Avid Unity MediaNetwork for editing products supported by Avid Unity MediaNetwork workgroups.

Your MediaNetwork workgroup Cluster might not contain all the components or features described in the documentation.

This guide is intended for personnel responsible for installing, configuring, or maintaining a MediaNetwork workgroup. It provides installation and configuration information specific to the MediaNetwork hardware and software.

Symbols and Conventions

Avid documentation uses the following symbols and conventions:

Symbol or Convention	Meaning or Action
	A note provides important related information, reminders, recommendations, and strong suggestions.
	A caution means that a specific action you take could cause harm to your computer or cause you to lose data.
	A warning describes an action that could cause you physical harm. Follow the guidelines in this document or on the unit itself when handling electrical equipment.
>	This symbol indicates menu commands (and subcommands) in the order you select them. For example, File > Import means to open the File menu and then select the Import command.
▶	This symbol indicates a single-step procedure. Multiple arrows in a list indicate that you perform one of the actions listed.
⌘	This symbol represents the Apple or Command key. Press and hold the Command key and another key to perform a keyboard shortcut.
Margin tips	In the margin, you will find tips that help you perform tasks more easily and efficiently.
Italic font	Italic font is used to emphasize certain words and to indicate variables.
`Courier Bold font`	Courier Bold font identifies text that you type.
Click	Quickly press and release the left mouse button (Windows) or the mouse button (Macintosh).
Double-click	Click the left mouse button (Windows) or the mouse button (Macintosh) twice rapidly.
Right-click	Quickly press and release the right mouse button (Windows only).

Symbol or Convention	Meaning or Action
Drag	Press and hold the left mouse button (Windows) or the mouse button (Macintosh) while you move the mouse.
Ctrl+*key* ⌘+*key*	Press and hold the first key while you press the second key.

If You Need Help

If you are having trouble using your MediaNetwork workgroup:

1. Retry the action, carefully following the instructions given for that task in this guide. It is especially important to check each step of your workflow.
2. Check for the latest information that might have become available *after* the documentation was published in one of two locations:
   - If release notes are available, they ship with your application.
   - If ReadMe files are available, they are supplied in your Avid application folder. ReadMe files are also available from Help.

Release notes and ReadMe files are also available on the Avid Knowledge Center.

3. Check the documentation that came with your Avid application or your hardware for maintenance or hardware-related issues.
4. Visit the online Knowledge Center at www.avid.com/support. Online services are available 24 hours per day, 7 days per week. Search this online Knowledge Center to find answers, to view error messages, to access troubleshooting tips, to download updates, and to read/join online message-board discussions.
5. For Technical Support, please call 800-800-AVID (800-800-2843).

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Related Information

The following documents provide more information about the MediaNetwork workgroup, the MediaNetwork client, and other storage options:

- *Avid Unity MediaNetwork Site Preparation Guide*
- *Avid Unity MediaNetwork Upgrade Notes*
- *Avid Unity MediaNetwork System Overview*
- *Avid Unity MediaNetwork Management Guide*
- *Avid Unity MediaNetwork Troubleshooting Guide*
- *Avid Unity MediaNetwork Macintosh Fibre Channel Client Setup Guide*
- *MediaNetwork Macintosh Fibre Channel Client Quick Start Card*
- *Avid Unity MediaNetwork Windows Fibre Channel Client Setup Guide*
- *MediaNetwork Windows Fibre Channel Client Quick Start Card*
- *Avid Unity MediaNetwork PortServer Setup Guide*
- *Avid Unity MediaNetwork Macintosh Ethernet Client Setup Guide*
- *MediaNetwork Macintosh Ethernet Client Quick Start Card*
- *Avid Unity MediaNetwork Windows Ethernet Client Setup Guide*
- *MediaNetwork Windows Ethernet Client Quick Start Card*
- *Avid Unity MediaNetwork Supported Configurations*
- *Avid Unity MediaNetwork Release Notes*

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Chapter 1
Pre installation Overview

This chapter provides preliminary instructions before you install and configure the MediaNetwork Storage workgroup components.

Before You Begin

Keep the shipping boxes that come with your MediaNetwork environment. You might need to repackage and ship the components in the future.

Before you begin to install the File Manager and storage, do the following:

- Unpack all the components.
- Check the contents of each kit against the list shipped with the order to confirm you have received all the components.
- Examine all the components for damage, and contact Avid Customer Support if you notice any problems.
- Obtain a dedicated (static) IP address and host name for each of the following components in your MediaNetwork environment:
  - File Manager
  - Backup File Manager, if you have a failover configuration
  - MEDIASwitch 16-4G — 2 maximum
  - MediaNetwork Fibre attached client — 24 maximum
  - PortServer
  - MediaNetwork Ethernet client — 60 maximum

  You can use the nonrouting IP addresses presented throughout this manual to configure the network for the File Manager and MEDIASwitch 16-4Gs.

MediaNetwork Components

A MediaNetwork workgroup allows you to connect the latest in shared storage environments to your Avid workstations. The shared storage lets you set up a collaborative user environment where several editors can work on a project at the same time using the same video and audio files. The following sections describe the components that make up the MediaNetwork subsystems.

The MediaNetwork components are ready to mount in any standard 19-inch NEMA or EIA rack. The racks are used to mount the File Manager, storage, MEDIASwitch 16-4G, Media Servers, network switches, uninterruptible power supplies (UPSs), and other components.

Storage Subsystem

The MEDIArray ZX (or ZX3) storage array and the MEDIArray ZX4 storage are functionaly the same. The MEDIArray ZX4 storage system is needed to use the 4Gb speed. The term MEDIArray ZX is used throughout this manual and refers to both storage arrays. See the *Avid Unity MEDIArray ZX4 Setup Guide* for the differnces in slot configuration.

The storage subsystem provides high-capacity, expandable Fibre Channel shared storage and consists of:

- One to six rack-mount MEDIArray™ ZX drive enclosures

Avid supports a maximum of 96 drives in a drive set. six MEDIArray ZX drive enclosures allow the maximum number of data drives. Raw state drives can fill any unpopulated drive slots in the drive enclosure.

- (Option) Computer rack
- (Option) A UPSs and optional extended battery modules
- One or two rack-mount 16-port MEDIASwitch 16-4Gs
- One or two rack-mount File Managers.

For more information about failover configurations with two File Managers, see "File Manager Failover Configurations" on page 22.

- One standard keyboard, monitor, and mouse, or one optional pull-out keyboard, monitor, and mouse (KMM) assembly
- Optional rack-mount keyboard, video, and mouse (KVM) switch

File Manager Failover Configurations

If properlyenclosures connected to the same port using a loop connection configured with a redundant File Manager, the MediaNetwork workgroup supports automatic failover to a backup (Failover) File Manager if the active (Primary) File Manager fails. This ensures that the File Manager is not a single point of failure in your environment.

Communication through the first three drives in the drive set, as well as polling over two cross-connected Ethernet paths, ensures that any lack of response from the initially active File Manager occurs because it has gone offline. The problem is not due to a failure of the network connections between the two File Managers.

In a failover configuration, neither File Manager is assigned to a primary or backup role — the first system to come online becomes the Active File Manager and the second to come online becomes the Failover File Manager. If both systems come online at the same time, the active role is negotiated arbitrarily between the two File Managers. For this reason, Avid recommends that you physically label and refer to your first and second File Managers as FM1 and FM2 (or use a similar convention).

Component Layout Recommendations

You can install MediaNetwork workgroup components either into a single rack or into multiple racks (two or three racks, depending on the configuration). You can also place the network switches in their own rack. Plan the rack layout using the general guidelines in the following sections.

Single-Rack Layout

Use the following guidelines to determine your single-rack layout:

- Install the pull-out KMM assembly approximately 40 inches (1.016 meters) from the floor.
- Install the heaviest components (UPSs and drive enclosures) at the bottom of the rack:
  - Five to six drive enclosures with no UPSs
  - Three to four drive enclosures with one UPS
- Install the MEDIASwitch 16-4Gs above the KMM.
- Install the KVM switch above the MEDIASwitch 16-4Gs.
- Install the File Managers above the Media Servers.
- Install the servers for other Avid-integrated applications above the File Managers.

Multiple-Rack Layout

Use the following guidelines to determine your multiple-rack layout:

- Install up to eight drive enclosures in one rack.
- Install the pull-out KMM assembly approximately 40 inches (1.016 meters) from the floor in the second rack.
- Install the MEDIASwitch 16-4Gs above the KMM.
- Install the KVM switch above the KMM.
- Install the active File Manager and the backup File Manager at the bottom of the second rack.
- Install the servers for other Avid-integrated applications above the File Managers.

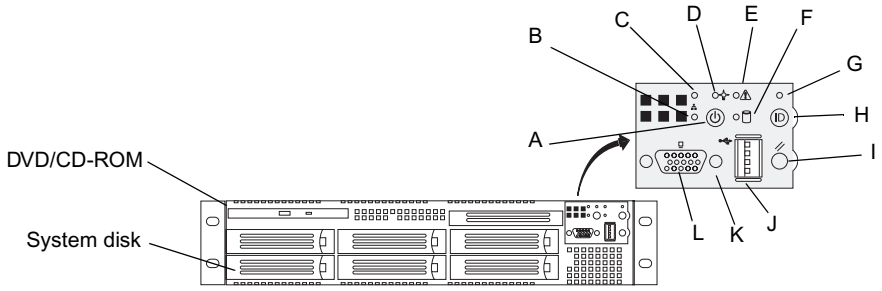
File Manager Physical Overview

The File Manager is 2u in height and is ready to mount in any standard 19-inch NEMA or EIA rack. This section explains the following:

- Front View of the File Manager
- Rear View of the File Manager

Front View of the File Manager

The following figure and table show and describe the front view and control panel of the SR2400 file manager.



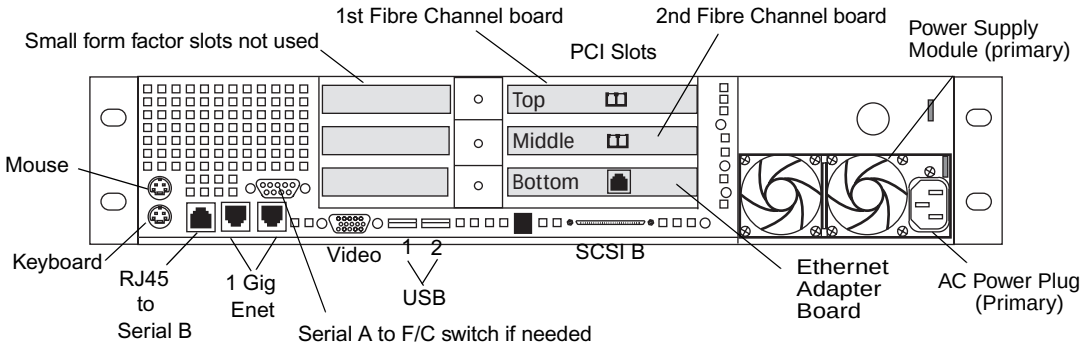
The following table describes the control panel shown in the above figure.

SR2400 Control Panel

A	Power/Sleep button	G	System ID LED
B	NIC 2 activity light	H	System ID button
C	NIC 1 activity light	I	System reset button
D	Power/Sleep LED	J	USB 2.0 Connector
E	System status LED	K	Recessed NMI button (need tool)
F	Hard drive activity light	L	Video connector

Rear View of the File Manager

The following figure shows and describes the rear of the SR2400 used as a file manager.



If you only have one ATTO board, the Ethernet board must be placed into the middle slot of the system.

Chapter 2
Installing the MediaNetwork Storage Subsystem Hardware

This chapter describes how to install and connect the File Managers and other MediaNetwork workgroup hardware.

Before you start the procedures in this chapter, you should be familiar with the pre installation information in Chapter 1.

This chapter contains the following sections:

- Installing Rack-Mount Rails and Brackets
- Installing File Managers and Storage Subsystem Components
- Connecting the File Manager and Storage

Installing Rack-Mount Rails and Brackets

All MediaNetwork rack-mount components are supplied with either mounting rails or brackets. You should follow the manufacturer's installation instructions supplied with each component to correctly attach the rails or brackets to the rack rails.

Where necessary, the documentation supplies specific rack-mount rail or bracket installation instructions. These instructions supersede the manufacturer's instructions.

Installing File Managers and Storage Subsystem Components

The File Managers and storage are placed into a rack for easy access to the cables, connectors, and drives. The following sections describe how to install the various components into the rack from bottom to top.

Uninterruptible Power Sources

Avid recommends that you use an uninterruptible power source to protect the data in your MediaNetwork workgroup. You should have an adequate uninterruptible power source to support these items:

- File Manager
- Failover File Manager
- MEDIArray ZX4 drive enclosures
- MEDIASwitch 16-4G
- KMM assembly
- KVM switch

The uninterruptible power source can be conditioned power for your computer room or several UPSs. If your environment uses conditioned power for your computer room, continue with "Installing the MEDIArray ZX4 Drive Enclosures" on page 29. If your environment uses UPSs, see the documents provided with the product for installation before continuing with "Installing the MEDIArray ZX4 Drive Enclosures" on page 29.

Installing the MEDIArray ZX4 Drive Enclosures

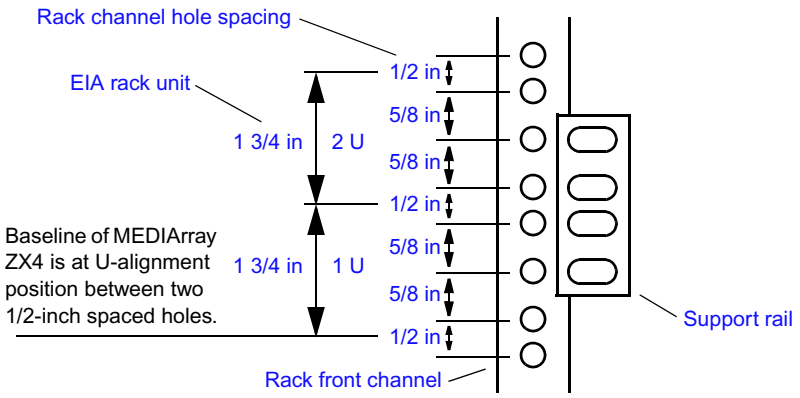
The MEDIArray ZX4 drive enclosures hold the MEDIArray ZX4 drives. Install the drive enclosures starting at the bottom of the rack unless you are installing a UPS. The following sections describe how to install the MEDIArray ZX4 in a rack.

Installing the MEDIArray ZX4 Rack-Mount Rails

If you are installing the MEDIArray ZX4 in a rack, follow the instructions supplied in the MEDIArray ZX4 rail kit to install the rack-mount rails while ensuring that:

- The rails do not interfere with the power strips, power cords, or other cables at the back of the rack.
- The bottom of the MEDIArray ZX4 is at the bottom of a U-alignment space.
- The rails span two U-alignment spaces and use the middle two slots for screws (see “Aligning the MEDIArray ZX4 Rails to the Rack” on page 30).
- The rails allow the MEDIArray ZX4 to slide completely into the rack.
- The front edge of the slides are set back approximately 1/2 inch from the rack front channels.
- The rails attach as far forward on the MEDIArray ZX4 as possible.
- If you are installing the rails in a rack that does not have threaded mounting holes, you will need to locate four clip nuts in the rail kit. Slip the clip nuts over the holes in the rack front and back channels where you will be installing the screws for the drive enclosure rails.
- If you are installing several drive enclosures, install all the support rails *before* you begin to install the drive enclosures.
- When installing multiple MEDIArray ZX4 drive enclosures, make sure you position each subsequent set of support rails approximately 4 U above the bottom of the previous set of support rails. The holes in the rails should align so that you can use the top or bottom holes.

Aligning the MEDIArray ZX4 Rails to the Rack



Mounting a MEDIArray ZX4

Mounting the MEDIArray ZX4 on the rack-mount rails is a two-person task. It is heavy, fits tightly into the rack rails, and the rails might need to be spread slightly to fit the MEDIArray ZX4. If you try to mount the MEDIArray ZX4 alone, you might damage the MEDIArray ZX4 or injure yourself.

To mount the MEDIArray ZX4 on the rack-mount rails:

1. Slide the rack-mount rails out of the rack until fully extended.
2. Lift the MEDIArray ZX4 into position with one person on each side of the rack.
3. Place the rail slides on the MEDIArray ZX4 onto the extended rails.

Slide the MEDIArray ZX4 into the rack. You should hear the slides click onto the rails as you push the MEDIArray ZX4 into the rack.

Installing a Standard Keyboard, Monitor, and Mouse

The File Manager ships with a keyboard and mouse. You need to supply a monitor and a monitor shelf before you can connect the monitor to the File Manager.

You can provide your own monitor and shelf or purchase them from Avid. If you purchased a KMM assembly from Avid, continue with “Installing the Keyboard, Monitor, and Mouse (KMM) Assembly” on page 32.

Installing the Shelf

Follow the installation instructions supplied with the shelf, ensuring that:

- The shelf does not interfere with the power strips, power cords, or other cables at the back of the rack.
- The shelf allows the monitor to slide completely into the rack.
- You install the rails at the nearest U-alignment position.
- The bottom of the shelf is at the bottom of a U-alignment position.

Installing the Monitor

To install the monitor:

1. Set the monitor on the shelf.
2. Route the power cord and cable to the back of the shelf.

Connecting the Monitor Power Cord

To connect the monitor power cord:

1. Plug one end of the power cord into the back of the monitor.
2. Plug the other end of the power cord into the right power strip in the back of the rack.

Installing the Keyboard, Monitor, and Mouse (KMM) Assembly

The KMM is a rack-mount assembly that includes a standard keyboard, liquid crystal monitor, and trackball. It requires 1 U of rack space. The monitor pivots and folds flat so that the KMM can slide into the rack for storage when it is not in use.

The KMM is an option for the MediaNetwork workgroup. If your workgroup does not include the KMM, you will need to use a standard PC keyboard, PS/2 mouse, and monitor. To install these components, see "Installing a Standard Keyboard, Monitor, and Mouse" on page 31.

Installing the KMM Rack-Mount Rails

Follow the instructions supplied with the KMM to install the rack-mount rails, ensuring that:

- The rails do not interfere with the power strips, power cords, or other cables at the back of the rack.
- The rails allow the KMM to slide completely into the rack.
- The rails are installed at the nearest U-alignment position, which is approximately 40 inches (1.016 meters) from the floor.
- The bottom of the KMM is at the bottom of a U-alignment position.

Mounting the KMM

To mount the KMM on the rack-mount rails:

1. Align the fixed rails attached to the sides of the KMM with the sliding rails attached to the rack.
2. Push the KMM onto the sliding rails and into the rack. You will hear the rails click as they lock in place.
3. To make sure the KMM is properly seated, carefully pull it out of the rack. Make sure that the KMM stops and does not come out of the rack. Support the KMM in case the rails did not lock in place and the KMM slides off the rails.
4. If the KMM does not stop, make sure its rails are aligned with the sliding rails in the rack.

Connecting the KMM Power Cord

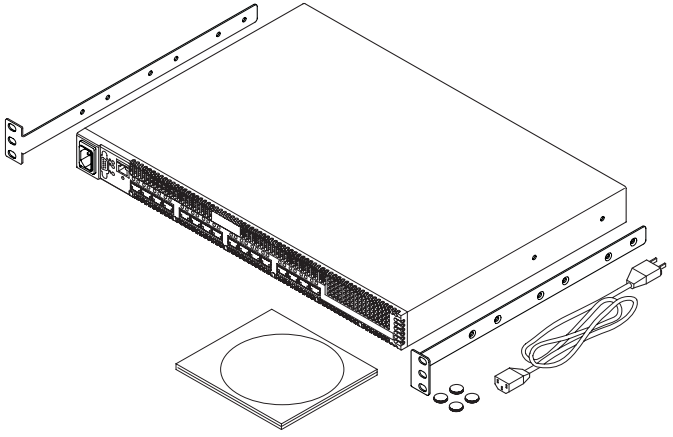
To connect the KMM power cord:

1. Plug one end of the power cord into the back of the KMM assembly.
2. Plug the other end of the power cord into the left power strip in the back of the rack.

Installing the MEDIASwitch 16-4G

The 16-port, 4-Gb MEDIASwitch 16-4G connects the storage and clients to the File Manager. It allows several clients to use the storage simultaneously and prevents interruptions by allowing other clients in the workgroup to continue working if one or more clients go offline. The MEDIASwitch 16-4G product ships with the following items:

- MEDIASwitch 16-4G
- Mounting brackets (2)
- Rubber feet (4)
- Power cord
- Documentation on CD-ROM (you should use this document for installation)

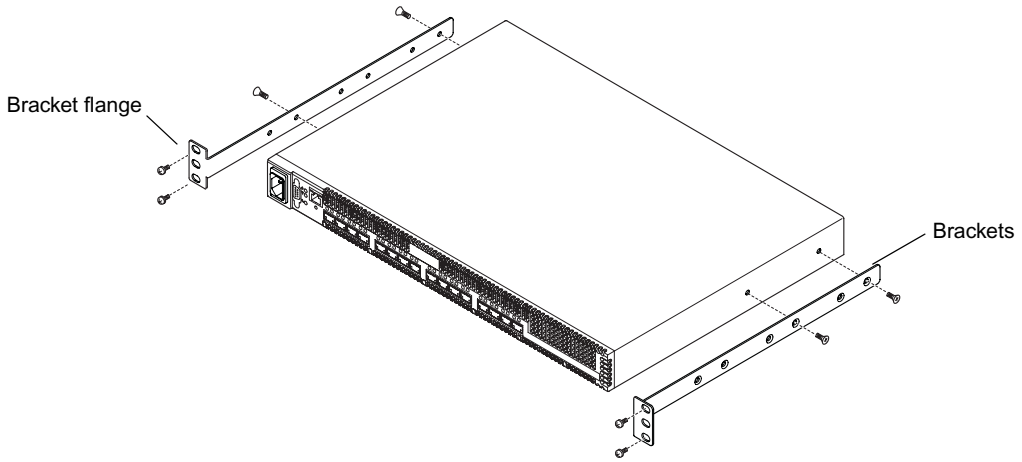


The MEDIASwitch 16-4G mounts in the rack above the drive enclosures. If you have two MEDIASwitch 16-4Gs, then mount them with *no space* in between.

Mounting the MEDIASwitch 16-4G

The MEDIASwitch 16-4G can be placed on a desktop using the four rubber feet or rack-mounted that occupies 1U of space in an EIA rack. To mount the MEDIASwitch 16-4G in a rack refer to the following instructions and figure below.

1. Fasten the brackets to the switch.
2. Place the switch into the rack.
3. Fasten the bracket flanges to the rack with two screws on each side.



MEDIASwitch 16-4G Port Requirements

The MEDIASwitch 16-4G has 16 ports, 0 though 15. The MediaNetwork workgroup has specific requirements for placing small form-factor pluggable (SFP) connectors into the MEDIASwitch 16-4G ports.

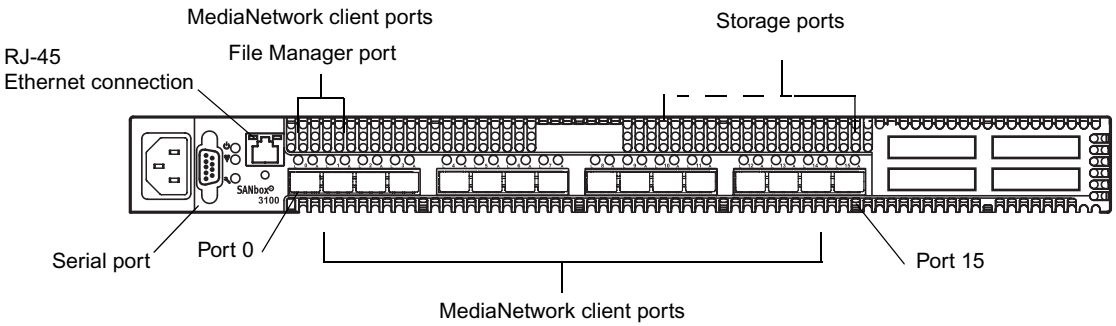
In the MediaNetwork workgroup, the MEDIASwitch 16-4G can be configured for up to two File Manager ports (ports 0 and 1), up to six storage ports (ports 10 to 15), with the remaining host ports available for MediaNetwork Fibre attached clients. "MEDIASwitch 16-4G Port Layout" shows the configuration options for the ports on the MEDIASwitch 16-4G.

If you only connect one File Manager and one MEDIArray ZX4 drive enclosure the remaining ports can be used for clients.

You can connect one File Manager to each File Manager port. You can connect one MEDIArray ZX4 drive enclosure to each storage port. You can connect one MediaNetwork client to each host port.

It is very important that you determine how you configure your storage ports. You will need this information when loading the configuration files into the MEDIASwitch 16-4G later in the installation process.

MEDIASwitch 16-4G Port Layout



All ports are set as Fabric ports by default. If you are planning on connecting two MEDIArray ZX4 enclosures connected to the same port using a loop connection, MEDIArray, or MEDIArray IIs, make sure you know which ports you use, you need that information later in "Configuring Specific Ports on the MEDIASwitch 16-4G" on page 58.

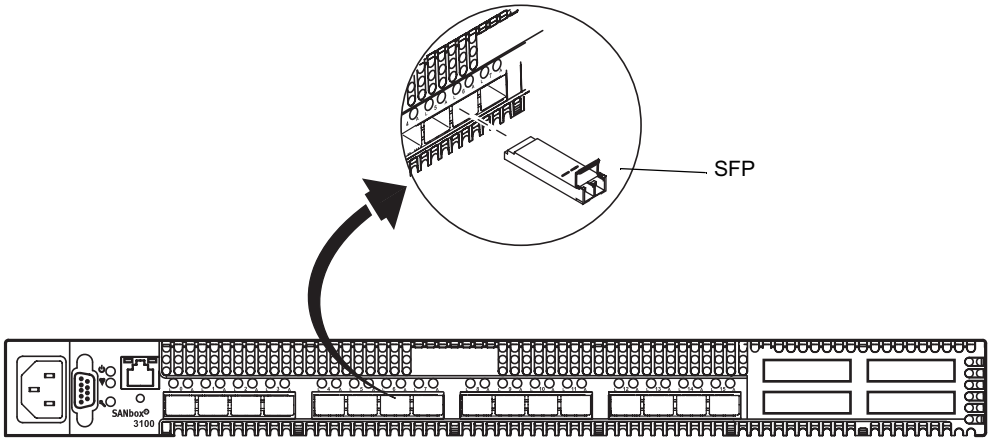
Installing an SFP Connector

The MEDIASwitch 16-4G can use up to sixteen SFP connectors. The SFP connectors allow you to attach cables from the File Manager, the MediaNetwork clients, and the drive enclosures to the MEDIASwitch. SFP connectors are supplied separately.

To install an SFP connector into a MEDIASwitch 16-4G:

1. Locate an SFP connector.
2. Position an SFP connector in front of a MEDIASwitch 16-4G port (see "Installing an SFP Connector" on page 36). Make sure the optical connector is facing *away* from the MEDIASwitch 16-4G and the pull handle is on the top.

Installing an SFP Connector



3. Slide the SFP connector into the MEDIASwitch 16-4G port. You should hear the retainer clips click when they engage the port.
4. Repeat steps 1 to 3 for each SFP connector in your workgroup.

Remove any SFP connectors that are not populated. This will eliminate the risk of invalid error messages being logged by your software.

Connecting the MEDIASwitch 16-4G Power Cord

To connect the MEDIASwitch 16-4G power cord:

1. Plug one end of the power cord into the back of the switch.
2. Plug the other end of the power cord into the right power strip in the back of the rack.
3. If you have two switches, plug the second MEDIASwitch 16-4G power cord into the left power strip in the back of the rack.

Installing the KVM Switch

The KVM switch allows you to connect the File Manager and multiple MediaNetwork clients (such as TransferManager or MediaManager) to a single keyboard, monitor, and mouse. The keyboard, monitor, and mouse can be standalone devices (see "Installing the Keyboard, Monitor, and Mouse (KMM) Assembly" on page 32) or a KMM assembly.

Installing the KVM Switch Rack-Mount Bracket

Follow the instructions supplied with the KVM switch to install the rack-mount bracket, ensuring that:

- The bracket does not interfere with the power strips, power cords, or other cables at the back of the rack.
- The bracket allows the KVM to slide completely into the rack.
- The bottom of the KVM is at the bottom of a U-alignment position.

Mounting the KVM Switch

To mount the KVM on the rack-mount bracket:

1. Align the KVM with the opening in the bracket.
2. Push the KVM into the bracket until the front of the KVM touches the front of the rack. The indentations in the bottom of the KVM should align with the support rails on the bracket.
3. Screw the bracket and the KVM together using the screws supplied with the KVM.

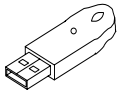
Connecting the KVM Power Cord

To connect the KVM power cord:

1. Plug one end of the power cord into the back of the KVM.
2. Plug the other end of the power cord into the right power strip in the back of the rack.

Installing the File Manager

The File Manager controls the files on the storage subsystem and also controls MediaNetwork client access to the files. The File Manager is rack mountable and requires 2 U of rack space. Your MediaNetwork workgroup might include a Failover File Manager to limit downtime if there is a problem with the Primary File Manager.



Before you install the File Manager, you need to add the MediaNetwork USB application key (also called a dongle). The USB application key determines how many MediaNetwork clients can simultaneously use your MediaNetwork workgroup.

Do not lose the USB application key. Your MediaNetwork workgroup does not function without it. If you lose the USB application key, you must purchase another one from Avid to use your MediaNetwork software.

To connect the application key to your MediaNetwork workgroup:

1. Locate the USB application key in your MediaNetwork kit.
2. Attach the USB application key to one of the rear USB ports of the File Manager (see “Rear View of File Manager” on page 41).

When the File Manager is configured for automatic failover, a 10/100BASE-T Ethernet adapter board is also installed.

Do not use the built-in USB connector on the front of the SR2400 File Manager.

Installing the File Manager Rack-Mount Rails

Follow the instructions supplied with the File Manager to install the rear rack-mount rails, ensuring that:

- The brackets do not interfere with the power strips, power cords, or other cables at the back of the rack.
- The brackets allow the File Manager to slide completely into the rack.
- The bottom of the File Manager is at the bottom of a U-alignment position.

Mounting the File Manager

If you have ordered the rackmount kit for the File Manager, use the instructions in the kit to mount the File Manager into the rack.

If other equipment is installed close to the brackets, you might need help in supporting the rear of the File Manager.

Connecting the File Manager Power Cord

To connect the File Manager power cord:

1. Plug one end of the power cord into the top power outlet on the back of the File Manager.
2. Plug the other end of the power cord into the left power strip in the back of the rack.

Installing the Failover File Manager

The Primary File Manager and Failover File Manager are identical hardware components. If your MediaNetwork workgroup has a Failover File Manager, follow the instructions in “Installing the File Manager” on page 38.

Installing the Ethernet Hub

You use an Ethernet hub to connect the Primary File Manager, the Failover File Manager, and the MEDIASwitch 16-4G together. This allows you to manage the switches from either File Manager.

Installing the Rack-Mount Bracket

Follow the instructions supplied with the Ethernet hub to install the rack-mount bracket, ensuring that:

- The bracket does not interfere with the power strips, power cords, or other cables at the back of the rack.
- The bracket allows the hub to slide completely into the rack.
- The bottom of the hub is at the bottom of a U-alignment position.

Mounting the Ethernet Hub

To mount the Ethernet hub on the rack-mount bracket:

1. Align the Ethernet hub with the opening in the bracket.
2. Push the Ethernet hub into the bracket until the front of the Ethernet hub touches the front of the rack. The indentations in the bottom of the Ethernet hub should align with the support rails on the bracket.
3. Screw the bracket and the Ethernet hub together using the screws supplied with the Ethernet hub.

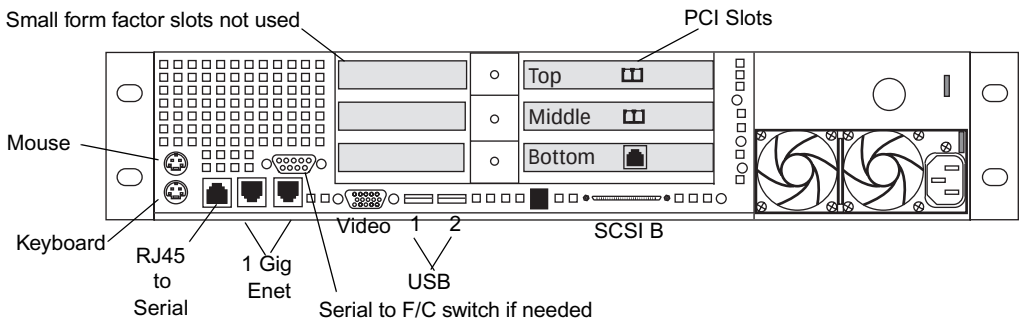
Connecting the Ethernet Hub Power Cord

To connect the Ethernet hub power cord:

1. Plug one end of the power cord into the back of the hub.
2. Plug the other end of the power cord into the right power strip in the back of the rack.

Connecting the File Manager and Storage

The rear view of the File Manager is shown in the following figure. Use this figure when connecting cables and others devices to the File Manager.



Rear View of File Manager

All PCI boards in the File Manager (or any SR2400) must be installed starting in the Top slot and the second board must *be in the middle slot. The second board cannot be in the bottom slot with the middle slot left open.*

The video connection shown in the figure Rear View of the File Manager cannot be used if the console is connected to the front video connection.

The following sections describe how to connect the components in your MediaNetwork workgroup.

If you are using a standard keyboard, monitor, and mouse, see “Connecting a Standard Keyboard, Monitor, and Mouse to the File Manager” on page 42.

If you are using a standard keyboard, monitor, and mouse, and a KVM, see “Connecting a Standard Keyboard, Monitor, and Mouse to the KVM” on page 42.

If you are using a KMM and a KVM, see “Connecting the KMM to the KVM (Option)” on page 42.

Connecting a Standard Keyboard, Monitor, and Mouse to the File Manager

To connect a standard keyboard, monitor, and mouse to the File Manager:

1. Locate the keyboard and mouse in the File Manager kit.
2. Attach the keyboard and mouse cables to the proper connections shows in "Rear View of File Manager" on page 41.
3. Attach the 15-pin monitor connector to the video port on the back of the File Manager.

The video connection shown in the figure Rear View of the File Manager cannot be used if the consoled is connected to the front video connection.

Continue with "Connecting the File Manager to the MEDIASwitch 16-4G" on page 44.

Connecting a Standard Keyboard, Monitor, and Mouse to the KVM

To connect a standard keyboard, monitor, and mouse to the KVM:

1. Locate the keyboard and mouse in the File Manager kit.
2. Attach the connector on the keyboard cable to the keyboard port on the back of the KVM.
3. Attach the connector on the mouse cable to the mouse port on the back of the KVM.
4. Attach the 15-pin connector on the monitor cable to the monitor port on the back of the KVM.

Continue with "Connecting the File Manager to the KVM (Option)" on page 43.

Connecting the KMM to the KVM (Option)

To connect the KMM to the KVM:

1. Locate the 15-pin video connector on the KMM.
2. Attach the connector to the monitor connector on the back of the KVM. Secure the connector with the thumbscrews in the connector.

3. Locate the cable with the keyboard and mouse connectors.
4. Push the keyboard cable and mouse cable connectors into the keyboard and mouse connectors on the back of the KVM.

Connecting the File Manager to the KVM (Option)

To connect the File Manager to the KVM:

1. Locate the KVM cable in the File Manager kit. It has a 25-pin connector on one end, and a 15-pin keyboard connector and a mouse connector on the other end.
2. Attach the 25-pin connector to port 1 on the back of the KVM. Secure the connector with the thumbscrews in the connector.
3. Attach the 15-pin connector to the video port on the back of the File Manager. Secure the connector with the thumbscrews in the connector.
4. Attach the keyboard cable to the keyboard port on the back of the File Manager.
5. Attach the other end of the keyboard cable to the keyboard connection on the KVM.
6. Attach the mouse cable to the mouse port on the back of the File Manager.
7. Attach the other end of the mouse cable to the kames connection on the KVM.

Connecting the Failover File Manager to the KVM

To connect the Failover File Manager to the KVM:

1. Locate the KVM cable in the File Manager kit. It has a 25-pin connector on one end, and a 15-pin keyboard connector and a mouse connector on the other end.
2. Attach the 25-pin connector to port 2 on the back of the KVM. Secure the connector with the thumbscrews in the connector.
3. Attach the 15-pin connector to the video port on the back of the Failover File Manager. Secure the connector with the thumbscrews in the connector.
4. Attach the keyboard cable to the keyboard port on the back of the File Manager.

5. Attach the other end of the keyboard cable to the keyboard connection on the KVM.
6. Attach the mouse cable to the lose port on the back of the File Manager.
7. Attach the other end of the mouse cable to the kames connection on the KVM.

Connecting the File Manager to the MEDIASwitch 16-4G

To connect the File Manager to the MEDIASwitch 16-4G using a Crossover Ethernet cable:

1. Locate a crossover ethernet cable in the File Managers kit.
2. Attach one end of the crossover Ethernet cable to the Primary Ethernet Port 1 (right of two ports) at the rear of the File Manager.
3. Attach the other end of the cable to the Ethernet connection of the MEDIASwitch 16-4G.

To connect the File Manager to the MEDIASwitch 16-4G:

1. Locate a 10-foot (3-meter) optical cable in the File Manager kit.

If the File Manager is set up for dual switches, two Fibre Channel adapter boards are installed. Attach the first cable to the top board in the File Manager PCI card bracket on the back of the File Manager.

2. Attach one end of the cable to the Fibre Channel adapter board populating the top slot in the File Manager PCI card bracket. Secure the optical cable by firmly inserting the connector into the optical port.
3. Attach the other end of the cable to port 1 on the first switch.
4. If you have a second switch, locate another 10-foot (3-meter) optical cable in the File Manager kit.
5. Attach one end of the cable to the Fibre Channel adapter board populating the middle slot in the File Manager PCI card bracket.
6. Attach the other end of the cable to port 1 on the second switch.

Connecting the Failover File Manager to the MEDIASwitch 16-4G

To connect the Failover File Manager to the MEDIASwitch 16-4G:

1. Locate a 10-foot (3-meter) optical cable in the File Manager kit.

If the File Manager has two Fibre Channel adapter boards, attach the cable to the top board in the File Manager PCI card bracket.

2. Attach one end of the cable to the Fibre Channel adapter board. Secure the optical cable by firmly inserting the connector into the optical port.
3. Attach the other end of the cable to port 2 on the first switch.
4. If you have a second switch, locate another 10-foot (3-meter) optical cable in the File Manager kit.
5. Attach one end of the cable to the Fibre Channel adapter board populating the middle slot in the Failover File Manager PCI card bracket.
6. Attach the other end of the cable to port 2 on the second switch.

Connecting the MEDIASwitch 16-4G Serial Port to the File Manager for Initial Switch Configuration

Connect the MEDIASwitch 16-4G serial port to the File Manager to use an alternative method of changing the switch IP address in your initial switch configuration. Although we document changing the MediaSwitch IP address using the MEDIASwitch 16-4G manager software, you can also use the serial cable to change or detect the switch's IP address

To connect the MEDIASwitch 16-4G to the File Manager:

1. Locate the RJ45-to-9-pin serial adapter in the File Manager kit.
2. Locate the serial cable supplied with the MEDIASwitch 16-4G.
3. Connect the RJ45-to-9-pin serial adapter to the RJ45 Serial port on the rear panel of the File Manager.
4. Connect a serial cable from the MEDIASwitch 16-4G to the 9-pin connector on the serial adapter.
5. Connect a serial cable from the MEDIASwitch 16-4G to the 9-pin connector on the MEDIASwitch 16-4G.

Connecting the MEDIArray ZX4 Drive Enclosure to the MEDIASwitch 16-4G

Please refer to the *Avid MEDIArray ZX4 Setup Guide* for a complete explanation of how you connect a MEDIArray ZX4 drive enclosure to a MEDIASwitch 16-4G.

However, when you connect a MEDIArray ZX4 to a MEDIASwitch 16-4G you must take the following into consideration:

- A MEDIArray ZX4 can connect to a maximum of two MEDIASwitch 16-4Gs of the same speed.
- If MEDIArray ZX4s are the only storage devices you are using, the maximum number of MEDIArray ZX4s per Unity system is 6 fully configured MEDIArray ZX4s. The MEDIArray ZX4s can be configured in the following ways:
  - One MEDIArray ZX4 connected to one MEDIASwitch 16-4G port.
  - Two MEDIArray ZX4s can be looped together and connected to one MEDIASwitch 16-4G port.
  - A MEDIArray ZX can be looped together with a MEDIArray ZX4 and connected to one MEDIASwitch 16-4G port
  - One MEDIArray ZX4 connected to two MEDIASwitch 16-4Gs. In a dual MEDIASwitch 16-4G environment each MEDIArray ZX4 would have two Fibre Channel boards.

The type of cable you use depends upon the type of switch and the MEDIArray ZX4 configuration used. The following cable information should be taken into consideration:

- If you are installing the optical cable for use with a 2-Gb MEDIASwitch 16-4G, the cable needs LC optical cable connectors at both ends.
- If you are looping two MEDIArray ZX4 enclosures to a MEDIASwitch 16-4G you need three simplex cables. Two simplex cables 3 meters in length and one simplex cable .5 meters in length. The type of ends on the 3 meter cables depend upon the switch you are connecting to.

Connecting the Ethernet Switch in a MediaNetwork System

You must connect an Ethernet switch to your Ethernet local area network (LAN) to enable the clients in a PortServer Pro workgroup to do the following:

- Obtain a license to use the PortServer Pro (The File Manager must also be connected to the LAN.)
- Easily share project information with other MediaNetwork or PortServer Pro clients
- Use other Media Services (such as MediaManager)

A connection to a LAN is required to allow access by PortServer Pro clients to MediaNetwork workspaces shared by the PortServer system. The following sections provide information to install an Ethernet switch.

You can connect the Ethernet switch directly to your LAN or to an additional Ethernet switch that you purchased from Avid. This additional switch allows you to connect the File Manager, all the PortServers, and the MEDIASwitch 16-4G 16s to simplify the network and MEDIASwitch 16-4G management. For more information on PortServer Pro configurations, see the *Avid Unity MediaNetwork PortServer Setup Guide.*

Connecting the File Manager to the Ethernet Switch

To connect the File Manager to the Ethernet switch:

1. Locate an Ethernet cable in the File Manager kit.
2. Attach one end of the cable to port 1 on the switch.
3. Attach the other end of the cable to the File Manager Ethernet adapter card in the PCI card bracket (see “Rear View of File Manager” on page 41).

Connecting your File Manager to an Ethernet switch is optional in a MediaNetwork workgroup.

Connecting the Failover File Manager to the Ethernet Switch

To connect the Failover File Manager to the Ethernet switch:

1. Locate an Ethernet cable in the File Manager kit.
2. Attach one end of the cable to port 2 on the switch.
3. Attach the other end of the cable to port 1 of the File Manager built-in Ethernet.

Connecting the MEDIASwitch 16-4G to the Ethernet Switch

To connect the MEDIASwitch 16-4G to the Ethernet switch:

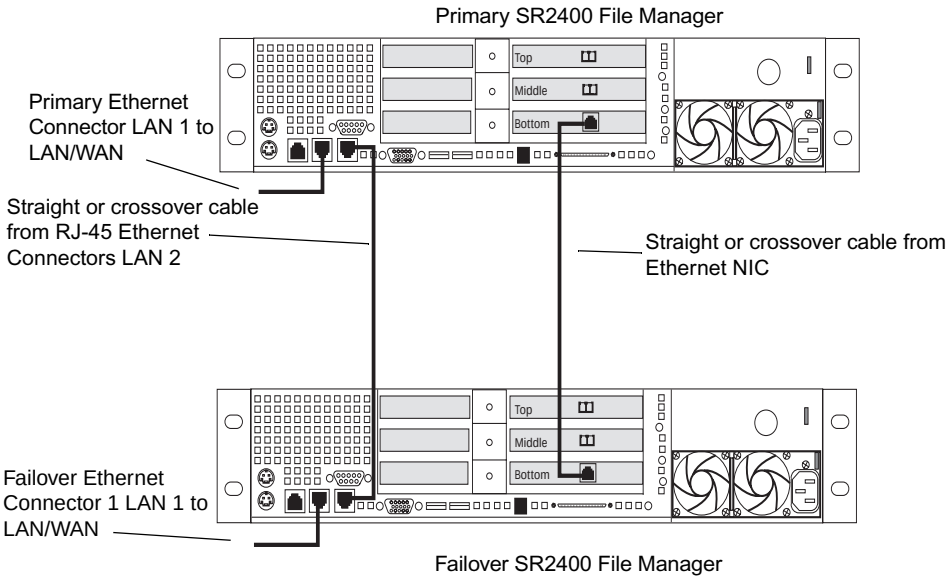
1. Locate an Ethernet cable.
2. Attach one end of the cable to port 3 on the switch.
3. Attach the other end of the cable to the RJ-45 Ethernet connection on the back of the switch.
4. If you have a second switch, repeat steps 1 to 3 using port 4 on the switch instead.

The MEDIASwitch 16-4Gs have the same IP address by default. For more information on IP address configuration, see Table on page 50.

Cross-Connecting the File Managers in a Failover Configuration

Use figure "File Managers in a Failover Configuration" on page 49, table "File Manager IP Addresses" on page 50, and the following instructions to connect and configure the File Managers for failover operation.

File Managers in a Failover Configuration


Primary SR2400 File Manager
Primary Ethernet Connector LAN 1 to LAN/WAN
Straight or crossover cable from RJ-45 Ethernet Connectors LAN 2
Straight or crossover cable from Ethernet NIC
Top
Middle
Bottom
Failover Ethernet Connector 1 LAN 1 to LAN/WAN
Failover SR2400 File Manager

If you only have one ATTO board, the Ethernet board must be placed into the middle slot of both systems.

To connect the Primary File Manager and Failover File Manager:

1. Locate a straight or crossover Ethernet cable in the File Manager kit.
2. Connect Ethernet connector 2 of one File Manager to the Ethernet connector 2 of the other File Manager using the cable.
3. Locate a straight or crossover Ethernet cable in the File Manager kit.
4. Connect the Ethernet adapter board in the Primary File Manager to the Ethernet adapter board in the Failover File Manager using the cable.
5. Attach the Ethernet connector 1 on the Primary File Manager to your LAN/WAN.
6. Attach the Ethernet connector 1 of the Failover File Manager to your LAN/WAN.
7. Configure the IP addresses for the File Managers as shown in table “File Manager IP Addresses” on page 50.

File Manager IP Addresses

IP Address	Description
192.168.1.1[a]	Primary File Manager RJ45 Ethernet connection1
192.168.2.1	Primary File Manager RJ45 Ethernet connection 2
192.168.3.1	Primary File Manager 10/100 Ethernet PCI NIC
192.168.1.2[a]	Failover File Manager RJ45 Ethernet connection 1
192.168.2.2	Failover File Manager RJ45 Ethernet connection 2
192.168.3.2	Failover File Manager 10/100 Ethernet PCI NIC

a. The default IP address to use for configuring the Fibre Channel switch initially. Change this IP address to comply with your specific LAN IP addressing conventions when configuring the Fibre Channel switch for use in your network.

- Connector 1 is shown as Local Area Connection 1.
- Connector 2 is shown as Local Area Connection 2.
- Connector 3, is shown as Local Area Connection 3 (This is the RJ45 10/100BASE-T Ethernet full-height PCI NIC when installed).

For actual port and NIC locations, see figure "File Managers in a Failover Configuration" on page 49.

Chapter 3
Configuring the MEDIASwitch 16-4G

This chapter describes how to install the appropriate software and how to configure the MEDIASwitch 16-4G in your MediaNetwork workgroup. Installing the necessary software is a multistep process. Make sure you complete the sections in sequential order.

The IP addresses used in the following sections are recommendations. They are nonrouting IP addresses and can be used if your site currently does or does not have an Ethernet network. If your site has an Ethernet network, you can select unused IP addresses from your network environment for the MEDIASwitch 16-4Gs.

Configuration Overview

When you configure the MEDIASwitch 16-4G you need to perform the following:

1. Make sure that one or both of the MEDIASwitch 16-4Gs are physically connected via Ethernet to the File Manager and MEDIArray ZX4 enclosures. (see Chapter one and Chapter two).
2. Load the SANsurfer Switch Manager from the MediaNetwork 4.0 as explained in “Installing MEDIASwitch 16-4G Manager Software” on page 52.
3. If you have two MEDIASwitch 16-4Gs, change the address of one of the switches to make sure they both have different addresses, “Changing the MEDIASwitch 16-4G IP Address” on page 53.

4. Load the proper configuration for your system using the MediaSwitch Manager 16 program, "Loading the MEDIASwitch 16-4G Configuration" on page 55.
5. Setting proper configuration parametersto the ATTO 3300 board if needed.

Installing MEDIASwitch 16-4G Manager Software

V4.0 of the Avid Unity MediaNetwork software is a prerequisite for using MEDIASwitch 16-4G software.

If you have two MEDIASwitch 16-4Gs and your File Manager and switches are connected to an Ethernet network, you should turn off one switch before running MediaSwitch Manager 16 software for the first time to configure the switch IP addresses. This prevents the software from seeing duplicate IP addresses that can cause it to not recognize either switch.

To install MEDIASwitch 16-4G software:

1. Locate the MediaNetwork 4.0 CD-ROM.
2. Insert the CD-ROM into the File Manager CD-ROM drive. The CD-ROM is set to automatically start.
3. Go to Drivers_Firmware\FibreChannelSwitches\Qlogic
4. Double click SANsurferSwitchMgr_Windows_5.00.01.exe.
5. Follow the instaructions using the default parameters.
6. Click Done when complete.

Changing the MEDIASwitch 16-4G IP Address

The MediaSwitch16 ships with a default IP address of 192.168.1.129. If you do not need to change the IP address of the switch to an address on your internal network, continue with "Loading the MEDIASwitch 16-4G Configuration" on page 55.

However, if you have two MEDIASwitch 16-4Gs, you need to change the IP address of the second switch so that it does not conflict with the first switch. If you are not changing the IP address to an address on your internal network, use the IP address 192.168.1.130.

You should have turned off one of the MEDIASwitch 16-4Gs before loading the SANsurfer Switch Manager software (see the Note in "Installing MEDIASwitch 16-4G Manager Software" on page 52). You should mark the two MEDIASwitch 16-4Gs so you can easily distinguishes between them. For example, after you determine the address of each switch, place a label of some sort on the switch that you can see easily.

To change the IP address of the switch with power on:

1. Click the Start button and point to Programs, SANsurfer Switch Manager, and select SANsurfer Switch Manager.

If you have previously stored the default fabric view you will be asked to enter the encryption code. Do not type anything in, just click OK and continue to step 4.

   The SANsurfer Switch Manager Window opens.

2. Click Add. (this requires IP address, login, and password) and click Proceed.

   The Add a New Fabric window opens.

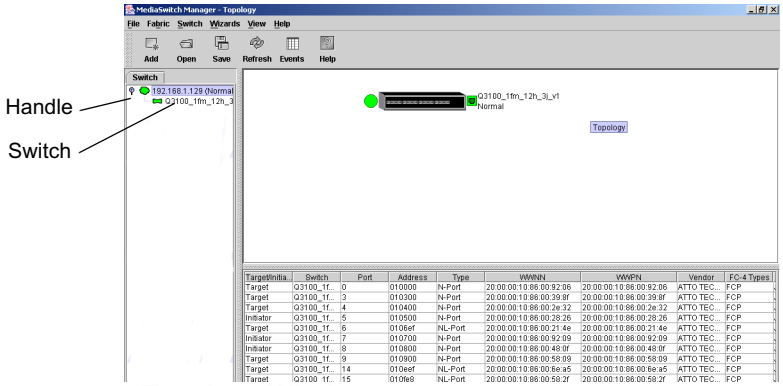
3. Enter the following:
   - The IP address of 192.168.1.129
   - At login: enter `admin`
   - AT password: enter `password` (all lower case)

4. Click OK.

   A Non-secure connection window opens, click OK.

   The Topology window opens, showing you the selected switch in your Fabric.

5. Click the handle on in the left pane of the window. This displays the switches that are in your Fabric using the Switch Faceplate view.



Topology Window

6. Click the Switch.
7. Select Network Properties From the Switch Menu.

Number 8 below is using the defualt numbers assined by Avid. If you need different Gateways or Subnwt mask, see your local IS department.

8. Change the following:
   - IP address to 192.168.1.130
   - Gateway to 0.0.0.0
   - Subnet Mask to 255.255.255.0
9. Click OK

   A Change Request Successful WIndow opens asking you to wait until the change is complete.
10. Click OK when the change is complete.
11. Choose File Exit and select “Exit without Saving”.
12. Turn on the other switch (with default address of 192.168.1.129) and the two switches are set to the proper addresses.

Loading the MEDIASwitch 16-4G Configuration

This section describes how to configure the MEDIASwitch 16-4G using the MEDIASwitch 16-4G software.

You need to download the MEDIASwitch 16-4G configuration file to have appropriate port configurations for the File Manager, MediaNetwork clients, and drive enclosures in your MediaNetwork workgroup. The configuration files are located on the Avid Unity MediaNetwork CD-ROM.

You must know where you will connect the File Manager, storage, and clients into the MEDIASwitch 16-4G. See "MEDIASwitch 16-4G Port Requirements" on page 35 for details.

If you have two MEDIASwitch 16-4Gs and have not yet changed the address of one of the switches, you should do so now. See "Changing the MEDIASwitch 16-4G IP Address" on page 53.

To download the MEDIASwitch 16-4G configuration file:

1. Click the Start button and point to Programs, SANsurfer_SwitchMgr, and select SANsurfer_SwitchMgr.

   The SANsurfer Switch Manager Window opens.

2. Click Add. (this requires IP address, login, and password) and click Proceed.

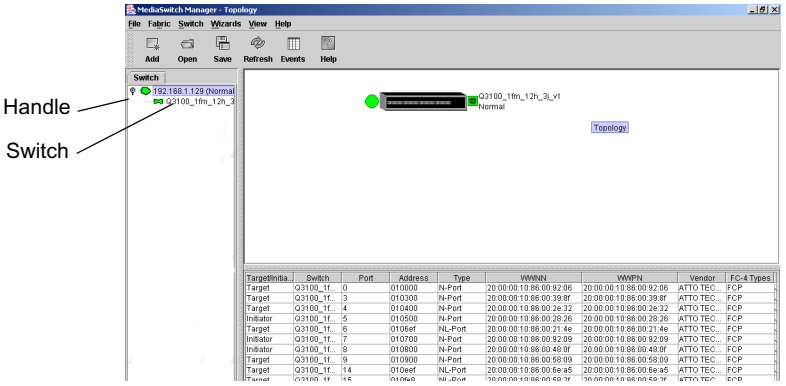
   The Add a New Fabric window opens.

3. Enter the following:
   - The IP address of 192.168.1.129
   - At login: enter `admin`
   - AT password: enter `password` (all lower case)

4. Click OK.

   A Non-secure connection window opens, click OK.

   The Topology window opens, showing you the selected switch in your Fabric.



Topology Window

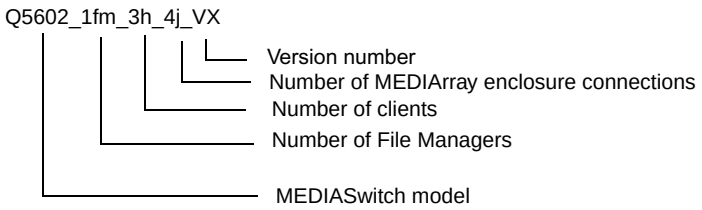
5. Click the handle on in the left pane of the window. This displays the switch in your Fabric using the Switch Faceplate view.
6. Click the Switch and the view changes.
7. Select Restore from the Switch Menu.

   The Restore window opens.

8. Click Browse and browse to the following location on the CD-ROM:

   Drivers_Firmware\FibreChannelSwitches\Qlogic\ConfigFiles \MediaSwitch_16-4G.

9. Select the configuration file for your system in the switch folder. The files have the following naming convention: for example; Q5602_1fm_11h_4j_v1.xml



There is a separate folder, ZonedforSharedUncompressed, with configurations for dual MEDiArrays.

10. Click Open. You return to the previous window.

It is important that in the next step you choose Selective Restore. If you do not, your network settings could change.

11. Click Selective Restore at the bottom left of the Window.

    The Select Restore Activation window opens.

12. Deselect “Network Properties and select “Configured Zoning”.
13. Click restoe from the middle of the window.
14. Click Yes.

    The Select Zone to be Activated window opens.

15. Click OK.

    You return to the Message Window and it shows confirmation as the installation occurs.

16. When the “Restore Completed OK” message appears in the window click Close.
17. Do one of the following:
    - If you have more than one switch, repeat the procedure by entering the switch address of the different switch (normally 192.168.1.130) in Step 3 and continue with the procedure.
    - If you have two switches and have completed the procedure twice you should continue to the next step.
18. From the File Menu Select :Save Default Fabric View File”.

    A dialog box opens asking to set an encryption code.

19. Do *not* type anything in. Click OK.

    This saves the view of the configured switch configuration so you do not need the IP address the next time you open the file.

The next time you open the file you will be asked to enter the encryption code. Do not type anything in, just click OK.

20. Continue with “Configuring Specific Ports on the MEDIASwitch 16-4G” on page 58.

Configuring Specific Ports on the MEDIASwitch 16-4G

If you are connecting the following devices in a loop connection to the MEDIASwitch 16-4G you need to use Telnet to make additional parameter changes not available by using MEDIASwitch 16-4G Manager.

- Two MEDIArray ZX enclosures connected to the same port using a loop connection
- Two MEDIArray II enclosures connected to the same port using a loop connection

If you are not connecting any of the above mentioned hardware in that manner you do not need to perform this procedure.

If you change a port to support the loop devices mentioned and then decide to change the device on that port to a Fabric device, you must use this procedure to change the configuration back to the default settings of false, not true.

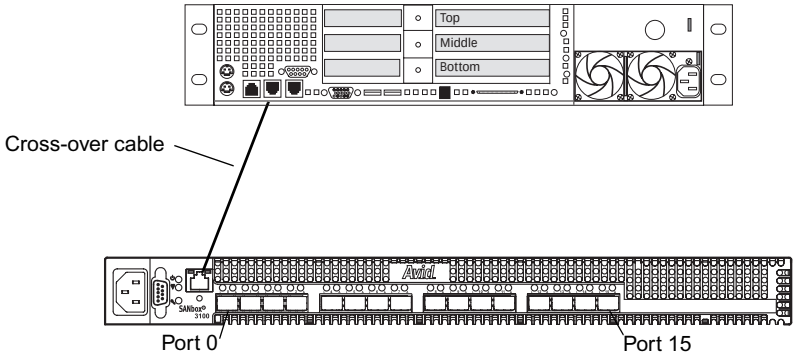
When you change/load a MEDIASwitch 16-4G configuration, as explained in "Loading the MEDIASwitch 16-4G Configuration" on page 55, you do *not* change the parameters set using this procedure.

Connecting the MEDIASwitch 16-4G to the File Manager

The following list provides some information you need to know before starting the procedure:

- You should run this procedure from the File Manager, but make sure the File Manager software is *not* running.
- If you have one MEDIASwitch 16-4G you can connect directly by using a cross-over cable between File Manager and the MEDIASwitch 16-4G as shown in MEDIASwitch 16-4G Ethernet Connection.
- If you have two MEDIASwitch 16-4Gs after you complete the procedure with the first switch, you can move the cable to the second switch.
- If the File Manager and both switches are connected to a Hub there is no need for the cross-over cable.

MEDIASwitch 16-4G Ethernet Connection



To change a port from Fabric mode to Fiber Loop mode using Telnet:

1. Go to Start -> Run.
2. Type: `Telnet switch address`. (the switch address would be 192.168.1.129 if it is the first MEDIASwitch 16-4G, or 192.168.1.130 if it is the second MEDIASwitch 16-4G.

Substitute the correct address if you have substituted your own address for the addresses used by Avid.

3. Login as `admin`.
4. The password is `password`.
5. At the prompt type: `admin start`.
6. At the prompt type: `config edit`.
7. At the prompt type: `set config port #`. # is the port number that the Fabric Loop mode device will be attached. See figure "MEDIASwitch 16-4G Ethernet Connection" on page 59.

This prompts a number of line items (parameters), 17 at this time, associated with the selected port. You need to change two of the parameters while leaving the remaining parameters items unchanged. To leave a parameter unchanged, hit Enter.

8. Hit Enter until you reach the Alfairness parameter.
9. Type: `true` and hit Enter.
10. Continue to hit Enter until you have gone through all parameters.
11. Type: `config save` and hit Enter.
12. Do one of the following:
    - If you need to change another port, repeat the procedure starting at step 7.
    - Type: `config activate` and hit Enter
13. Type [y] when prompted to verify this change.
14. Type `admin end` and hit Enter.
15. Type `exit` and hit Enter.

Configuring the ATTO 3300 to PTP-Preferred Mode

The ATTO 3300 boards that shipped prior to the release of v3.5 of Avid Unity MediaNetwork were not set to use Point-to-Point (PTP) Preferred mode of transfer. If you are purchasing an Avid Unity MediaNetwork system with the new MEDIASwitch 16-4G and have existing Fibre Channel clients or an older MEDIArray ZX enclosure that contain ATTO 3300 boards you need to change the setting on the ATTO 3300 board to use PTP preferred mode.

. The pre requisites for performing this procedure are:

- V3.5 or later Avid Unity MediaNetwork software
- V2.4 ATTO driver and firmware on the ATTO 3300 board.

See the Avid Unity MediaNetwork Release Notes for the required driver and firmware revision of the ATTO 3300 board.

- You are connecting to the MEDIASwitch 16-4G and not the older 9200 or 9100 MediaSwitches.
- You need the ExpressPCI Configuration Tool epcinf250.exe.

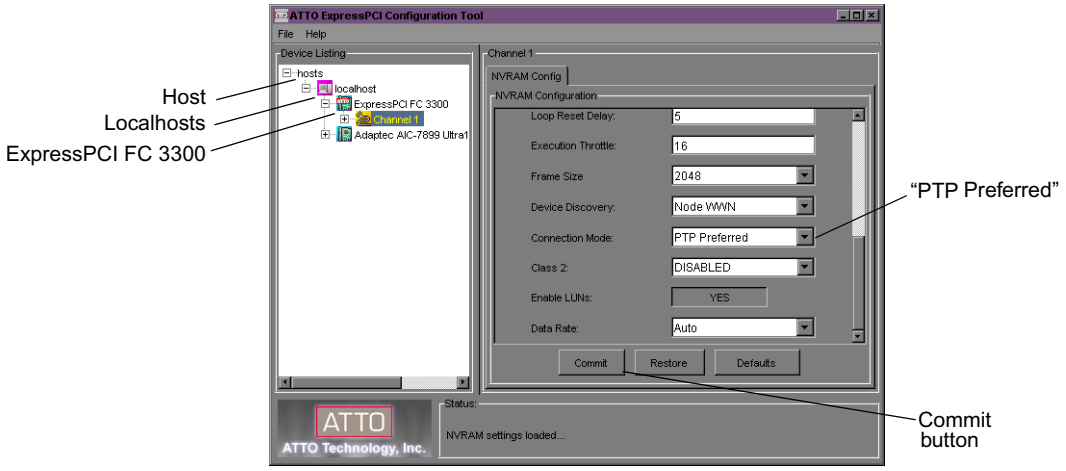
If your system has the above mentioned pre-requisites you will find the Express PCI Configuration Tool on your system disk in the following location:

Win\Drivers_Firmware\HostBusadapters\ATTO\Utilities\Windows\W2K_XP

To configure the ATTO 3300 board for PTP Preferred:

1. Unmount any client workspaces and shutdown the File Manager software.
2. Go to Start and point to Programs, ExpressPCI Configuration Tool, ExpressPCI Configuration Tool.
3. In the Device Listing category click the + sign to expand the Hosts.

ExpressPCI Configuration Tool



4. Click the + sign next to the Localhosts to expand localhosts.
5. Click the + sign next to the one of the EXPRESSPCI FC3300 host bus adapters to expand it. You should see Channel 1.
6. Click Channel 1 to select it.

   The right pane shows Connection Mode: Arbitrated Loop (AL).
7. Choose "PTP Preferred" using the drop down arrow on the right.

Do not choose "Point-to-Point (PTP)"

8. Do one of the following:
   - Click the Commit Button if this is your only ATTO 3300 board or this is the second time through the procedure for the second ATTO 3300 board.
   - Repeat steps 4 through 7 for the second ATTO 3300 board if you have two.
9. Select Exit from the File Menu.
10. Reboot the system.
11. After the system is booted, repeat steps 1 through 6 to make sure the Connection mode is PTP Preferred.
12. Repeat this procedure for all Fibre Channel clients and MEDIArray ZX enclosures.

Chapter 4

MediaNetwork File Manager Software Setup

This chapter describes how to install the MediaNetwork File Manager software that sets up and manages the files stored on the MediaNetwork workgroup. This software is supplied on a CD-ROM in the MediaNetwork installation kit.

Installing the MediaNetwork File Manager Software

You must install the MediaNetwork File Manager software on drive D — there might not be sufficient free space on drive C to completely save a local copy of the MediaNetwork file system metadata.

To install the MediaNetwork File Manager software:

1. Locate the MediaNetwork CD-ROM.
2. Locate and attach the application key (dongle) to the File Manager.
3. Insert the CD-ROM into the File Manager CD-ROM drive. The CD-ROM is set to start automatically and open the MediaNetwork Installation window. This takes approximately 30 seconds.

   If the CD-ROM does not start automatically, then start the installation manually as follows:

   a. Double-click the My Computer icon on the desktop. The My Computer window opens.

   b. Right-click the CD-ROM icon, and select AutoPlay. The MediaNetwork Installation window opens.
4. Select Product Installers. The screen changes to show the available products.
5. Select MediaNetwork Components. The screen changes to show the available MediaNetwork component installers.
6. Select Install File Manager. The Install Shield Wizard opens, displaying the Welcome screen.
7. Accept the default values presented by the InstallShield Wizard until the Setup Status screen appears, showing the installation progress. The destination for the software installation should default to drive D.
8. On the InstallShield Wizard Complete screen, select “Yes, I want to restart my computer now.”
9. Click Finish to complete the installation of the File Manager software and to reboot the File Manager.

Configuring the MediaNetwork File Manager Software

You need to configure the MediaNetwork software to establish a functioning MediaNetwork workgroup. This configuration requires that you:

- Create a drive set.
- Create an allocation group.
- Create a workspace.
- Create user accounts.

While you are configuring the MediaNetwork File Manager software, see the *Avid Unity MediaNetwork Management Guide* for information about the MediaNetwork software and configuration tools.

Avid Billing Application Information

Avid Unity MediaNetwork supports billing applications, such as ScheduALL™ from VizuALL, Inc., or databases, with information about storage usage. Appendix C provides complete instructions for installing and configuring the Avid billing application.

Chapter 5.
Configuring the File Manager

This chapter describes how to configure and install the appropriate software on the File Managers in your MediaNetwork workgroup. Installing the necessary software is a multistep process. Make sure you complete the sections in sequential order.

Before you start the procedures in this chapter, you should have installed the File Managers and other MediaNetwork workgroup hardware.

The IP addresses used in the following sections are recommendations. They are nonrouting IP addresses and can be used if your site currently does or does not have an Ethernet network. If your site has an Ethernet network, you can select unused IP addresses from your network environment for the File Manager.

Setting Up the File Manager

Set up the File Manager and, in failover configurations, the second File Manager as described in the following sections.

Quick File Manager Setup Summary

If you are already familiar with configuring the Windows 2000 systems, you can skip the detailed instructions in the rest of this chapter and perform the steps outlined here.

- Set the correct date, time, time zone, and daylight saving time option.
- Configure IP addresses and, if necessary, gateway IP addresses for the network adapter.

Setting the Date, Time, Time Zone, and Daylight Saving Time Option

You need to set the correct date, time, time zone, and daylight saving time option on the File Manager. This allows the "Synchronize time with File Manager" function on the MediaNetwork clients to work correctly.

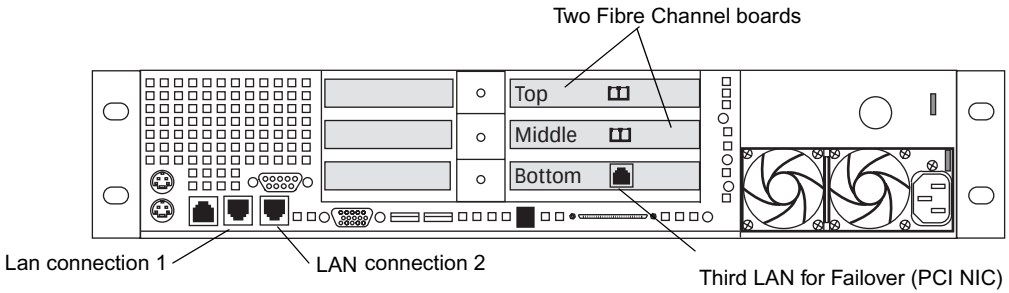
To set the date, time, time zone, and daylight saving time option on the File Manager:

1. Double-click the time in the Task bar. The Date/Time Properties dialog box opens.
2. Set the date and time using the Date & Time tab.
3. Click the Time Zone tab.
4. Set the time zone for the location of the File Manager. By default, Windows 2000 sets the time zone to "(GMT - 8:00) Pacific Time (US & Canada); Tijuana."
5. Select "Automatically adjust clock for daylight saving changes."
6. Click OK to close the Date/Time Properties dialog box and save the settings.

Configuring Network Properties for a Single File Manager

The file manager hardware has two built in Ethernet connections at the rear of the box and an optional third Ethernet connection on a PCI board if it is being used with a Failover system.

SIngle File Manger



All boards must be installed starting in the Top slot and the second board must be in the middle slot, it cannot be in the bottom slot with the middle slot left open. If you only have one ATTO board, the Ethernet board must be placed into the middle slot of both systems.

The system, as shipped, has two local (LAN) Ethernet ports, with IP addresses pre-set to the following IP addresses:

- LAN Connection 1 92.168.1.1
- LAN Connection 2 192.168.2.1

If you are using only a File Manager, a MEDIASwitch 16-4G, and a disk array you shouldn't need to change the Network LAN 1or LAN 2 IP addresses. However, if you need to check or re-configure the File Manager's network properties so that it can communicate with the MEDIASwitch 16-4G the following procedure is provided.

Make sure or you know which LAN port the Ethernet cable you will be using is plugged into. We use Port 1 as the example here.

This section describes how to set network properties for a workgroup with a single File Manager. If you have a failover configuration with two File Managers, continue with "Configuring Network Properties for the Primary File Manager in a Failover Configuration" on page 70.

To configure the network properties for the File Manager:

1. Right-click the Network Neighborhood icon on the desktop, and select Properties. The Network and Dial-up Connections Window opens.
2. Right click LAN and the LAN 1 properties Windows open
3. Select Internet Protocol (TCP/IP) and Click Properties. The Internet Protocol Properties Window opens.
4. Click "Use the following IP Address" and type in the following IP Address, type **`192.168.1.1.`**
5. Click the Subnet mask and the File Manager should fill in the subnet mask with 255.255.255.0. If not, type the subnet mask in the Subnet Mask text box. If any other subnet mask appears, change it to the correct mask value.
6. Click OK to set the changes.
7. Click OK to close the Network dialog box.

You only need to continue in this chapter if you are in a Failover environment. If you are in a Failover environment you will need to provide a basic configuration of the Failover Manager, see "Configuring Network Properties for the Primary File Manager in a Failover Configuration" on page 70 and configure the remaining network addresses for the first file manager, see "Configuring Network Properties for the Primary File Manager in a Failover Configuration" on page 70.

Configuring Network Properties for the Primary File Manager in a Failover Configuration

Refer to Chapter 2 for information on physically connecting two file managers in a Failover environment. This section explains how to configure the network properties for the Primary File Manager only in a Failover situation. To configure the actual Failover file manager, see Avid Unity MediaNetwork Failover File Manager Installation Notes.

To configure a Primary File Manger and a Failover File Manger in a failover environment, you need six dedicated nonrouting Internet IP addresses, three for the Primary File Manager and three for the Failover File Manager.

Two of the three needed IP addresses for the Primary File Manager should be already loaded in the first two LAN ports on the File Manager, but the remaining addresses need to be changed. The IP addresses for these ports must be on different subnets and require a subnet mask of 255.255.255.0.

Avid recommends that you use the nonrouting IP addresses in the following table when you are configuring File Managers for failover operation.

The File Manager or File Managers require static IP addresses when you are configuring your network. Avid installers and applications use the IP address to recognize the File Manager, not the computer name.

IP Addresses in a Failover Configuration

IP Address	Description
192.168.1.1[a] [b]	Primary File Manager RJ45 Ethernet connector 1
192.168.2.1[a]	Primary File Manager RJ45 Ethernet connector 2
192.168.3.1	Primary File Manager 10/100 Ethernet PCI NIC
192.168.1.2[b]	Failover File Manager RJ45 Ethernet connector 1
192.168.2.2	Failover File Manager RJ45 Ethernet connector 2
192.168.3.2	Failover File Manager 10/100 Ethernet PCI NIC

a. The default IP address loaded when you receive your system.
b. The default IP address to use for configuring the Fibre Channel switch initially. Change this IP address to comply with your specific LAN IP addressing conventions when configuring the Fibre Channel switch for use in your network.

Setting Up the IP Addresses

Before you continue, select one File Manager to act as the Primary File Manager and one to act as the Failover File Manager. This is important because you must set the IP addresses on the Primary File Manager *before* you set them on the Failover File Manager.

To set the IP addresses on the Primary File Manager:

1. Right-click the My Computer icon on the desktop, and select Properties. The System Properties box opens.
2. Click the Network ID tab.
3. Click the Properties button.
4. Type a unique name in the Computer Name text box. If the name in the text box is Avid, change it to a unique name that coincides with your internal computer-naming scheme.

Each File Manager must have a unique computer name.

5. If you are connecting to an in-house network, make sure the name in the Domain text box is correct.
6. Close all open Windows.
7. Right click My Network Places and select Properties.
8. Right click LAN Connection [that is LAN (1)] and select Properties.
9. Select Internet Protocol (TCP/IP).
10. Click the Properties button. The Internet TCP/IP Properties dialog box opens.
11. Click “Use the following IP Address”. and type in the first address from the list of six addresses in Table on page 71.
12. Click the Subnet mask and the File Manager should fill in the subnet mask with 255.255.255.0. If not, type the subnet mask in the Subnet Mask text box. If any other subnet mask appears, change it to the correct mask value.
13. If you plan to connect the File Manager to a subnet on your network, click the “Use the following DNS server Address” and type a DNS server IP address in the appropriate Preferred and Alternate text boxes.

See Appendix F for information on creating a DNS server.

14. If you plan to connect the File Manager to a subnet on your network, click the Advanced button, click the WINS Address tab and add the IP addresses for a primary and a secondary WINS server,
15. Click OK to close all the Windows.
16. Right click My Network Places and select Properties.
17. Right click LAN 2 Connection [that is LAN (2)] and select Properties.

18. Select Internet Protocol (TCP/IP).
19. Click the Properties button. The Internet TCP/IP Properties dialog box opens.
20. Click “Use the following IP Address”. and type in the second address from the list of six addresses in Table on page 71.
21. Click the Subnet mask and the File Manager should fill in the subnet mask with 255.255.255.0. If not, type the subnet mask in the Subnet Mask text box. If any other subnet mask appears, change it to the correct mask value.
22. If you plan to connect the File Manager to a subnet on your network, click the “Use the following DNS server Address” and type a DNS server IP address in the appropriate Preferred and Alternate text boxes.

See Appendix F for information on creating a DNS server.

23. If you plan to connect the File Manager to a subnet on your network, click the Advanced button, click the WINS Address tab and add the IP addresses for a primary and a secondary WINS server.Click OK to close all the Windows.
24. Right click My Network Places and select Properties.
25. Right click LAN 3 Connection and select Properties.
26. Select Internet Protocol (TCP/IP).
27. Click the Properties button. The Internet TCP/IP Properties dialog box opens.
28. Click “Use the following IP Address”. and type in the third address from the list of six addresses in Table on page 71.
29. Click the Subnet mask and the File Manager should fill in the subnet mask with 255.255.255.0. If not, type the subnet mask in the Subnet Mask text box. If any other subnet mask appears, change it to the correct mask value.
30. If you plan to connect the File Manager to a subnet on your network, click the “Use the following DNS server Address” and type a DNS server IP address in the appropriate Preferred and Alternate text boxes.
31. If you plan to connect the File Manager to a subnet on your network, click the Advanced button, click the WINS Address tab and add the IP addresses for a primary and a secondary WINS server.
32. Click OK to close all the Windows.

33. Click the Start button, and select Shut Down. The Shut Down Windows dialog box opens.
34. Select Restart and click OK. The new File Manager IP Addresses take effect after the system restarts.

Configuring the Failover File Manager

To configure the Failover File Manager, repeat all the steps in "Setting the Date, Time, Time Zone, and Daylight Saving Time Option" on page 68.

If your MediaNetwork workgroup is a failover configuration with redundant File Managers, the Failover Manager needs to be configured the same as the Primary File Manager with the exception of the Network properties.

You need to configure the remaining three IP addresses in the Network properties of the second or Failover File Manager. See *Avid Unity MediaNetwork Failover File Manager Installation Notes* for information on configuring the Network Properties for the Failover File Manager.

Appendix A

File Manager and Storage Specifications

The following sections provide the dimensions and weight, and the environmental, electrical, and power cord specifications for the components in the MediaNetwork workgroup environments.

Dimensions and Weight

The following table shows the dimensions and weight for the File Manager, the KMM assembly, the KVM switch, the MEDIArray ZX4 drive enclosure, the MEDIASwitch 16-4G, and the Ethernet switch.

Component Dimensions and Weight

Component	Height	Width	Depth	Weight
File Manager	3.45 in (88 mm) (2U)	16.9 in (423 mm)	26.46 in (672 mm)	51 lb (23.2 kg)
KMM	1.75 in (44 mm)	17 in (430 mm)	21 in (533 mm)	30 lb (13.6 kg)
KVM 8-port	1.75 in (44 mm)	15.40 in (391 mm)	9 in (229 mm)	6 lb (2.8 kg)
KVM 16-port	3.50 in (89 mm)	15.40 in (391 mm)	9 in (229 mm)	8 lb (3.8 kg)
MEDIArray ZX4 drive enclosure	6.88 in (175 mm)	16.94 in (430 mm)	27.19 in (691 mm)	84.0 lb (38.2 kg)

Component Dimensions and Weight (Continued)

Component	Height	Width	Depth	Weight
MEDIASwitch 16-4G	1.70 in (43.2 mm)	17.00 in (432 mm)	12.00 in (305 mm)	9 lb (4.08 kg)
Ethernet hub	1.7 in (44 mm)	17.3 in (440 mm)	6.8 in (173 mm)	5 lb (2.27 kg)

Environmental Specifications

The following table shows the environmental specifications for the File Manager, the KMM assembly, the KVM switch, the MEDIArray II drive enclosure, the MEDIASwitch, and the Ethernet switch.

Environmental Specifications

Component	Operating Temperature	Operating Humidity	Storage Temperature	Storage Humidity
File Manager	32°F to 122°F (0°C to 50°C)	10% to 80% non-condensing	-40°F to 158°F (-40°C to 70°C)	5% to 95% non-condensing
KMM	50°F to 104°F (10°C to 40°C)	20% to 80% noncondensing	9°F to 158°F (–12°C to 70°C)	10% to 90% noncondensing
KVM	32°F to 122°F (0°C to 50°C)	10% to 80% noncondensing	0°F to 158°F (–17°C to 70°C)	5% to 90% noncondensing
MEDIArray ZX4 drive enclosure and drives	40°F to 95°F (4°C to 35°C)	10% to 80% noncondensing	-40°F to 158°F (-40°C to 70°C)	5% to 95% noncondensing
MEDIASwitch 16-4G	41°F to 104°F (5°C to 40°C)	15% to 80% noncondensing	–40°F to 158°F (–40°C to 70°C)	25% to 90% noncondensing
Ethernet hub	32°F to 122°F (0°C to 50°C)	0% to 95% noncondensing	0°F to 149°F (–17°C to 65°C)	0% to 95% noncondensing

Electrical Specifications

The following table shows the electrical specifications for the File Manager, the KMM assembly, the KVM switch, the MEDIArray II drive enclosure, the MEDIASwitch, and the Ethernet switch.

Electrical Specifications

Component	Voltage	Frequency	Watts (Max. U.S.)
File Manager	115 or 230 V ac	50 to 60 Hz	700 W
KMM	100 or 240 V ac	50 to 60 Hz	10 W
KVM	115 or 230 V ac	50 to 60 Hz	20 W
MEDIArray ZX4 drive enclosure	115 to 230 V ac	50 to 60 Hz	460 W
MEDIASwitch 16-4G	90 to 250 V ac	50 to 60 Hz	60 W
Ethernet hub	100 to 240 V ac	50 to 60 Hz	10 W

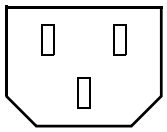
Power Cords

Select the power cords for the MediaNetwork workgroup hardware according to the country of destination; they must comply with local safety requirements.

Use the following guidelines to replace the original cord set.

- **CEE-22 requirements:** The female receptacle of the cord set, shown in The following figure must comply with CEE-22 requirements.

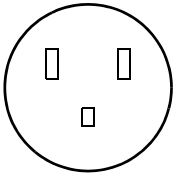
(CEE-22) Receptacle



- **United States and Canadian requirements:** In the United States and Canada, the male plug is a NEMA 5-15P style that is UL listed and CSA certified. The following figue shows the plug. You can use SVT cords

with desktop, countertop, or rack-mount units; all other equipment requires SJT cords. You can use only SJT-type cords for units that sit on the floor.

NEMA 5-15P Style Plug



- **European requirements:** In Europe, use only an H05VV-F, <HAR>, VDE, PVC, 3 x 1.00 mm^2 power cord.

  Für den Gebrauch in Deutschland muß ein Netzkabel des Typs H05VV-F, <HAR>, PVC, Größe, 3 x 1.00 mm^2 verwendet werden.

Select the cord set according to the current rating of your unit. See Table for the selection criteria of power cords in the United States, Canada, and Europe.

Power Cord Requirements

Size of Conductors in Cord			Maximum Current Rating of Unit	
Cord Type	**U.S./Canada**	**Europe**	**U.S./Canada**	**Europe**
SJT	16 AWG	3 x 1.00 mm^2	12 A	10 A
SVT	18 AWG	NA[a]	10 A	NA[a]
SVT	17 AWG	NA[a]	12 A	NA[a]

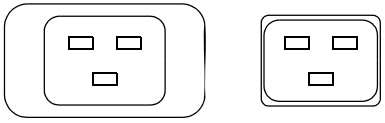
a. NA = Not applicable.

UPS Power Cord

The Avid-supplied UPS has special power cord requirements. Use the following guidelines to replace the original cord set on the UPS:

- **United States and Canadian requirements:** In the United States and Canada, the male plug is a NEMA L5-30P style that is UL listed and CSA certified.
- **Worldwide requirements:** The UPS ships with a replaceable power cord and a male plug that is an IEC C-20 style. The power cord and plug are UL listed and CSA certified. Figure shows the receptacle and the plug.

IEC C-20 Style Receptacle and Plug



Appendix B

International Character Support

MediaNetwork v3.3 and later provides support for international characters by migrating the MediaNetwork metadata from a multibyte character string (MBCS) encoding to the Unicode character encoding. This allows you to use international characters in your MediaNetwork folder and file names. When you install MediaNetwork on your File Manager, all of the folder and file names in your MediaNetwork workspaces will be converted to Unicode.

International characters can currently only be used for folder and file names. They cannot be used for computer names, user names, passwords, or workspace names.

This chapter contains the following sections:

- International Character Support for Windows 2000 or Windows XP Clients
- International Character Set Support

International Character Support for Windows 2000 or Windows XP Clients

If you are plan to use your Windows client with international characters, you need to configure the client to support these characters.

To set up a Windows 2000 or Windows XP client for international character support:

1. Click the Start button and select Settings > Control Panel. The Control Panel window opens.
2. Double-click Regional Options. The Regional Options dialog box opens.
3. Click the General tab. The General options appear.
4. In the “Language settings for the system” area, select the language that you want to use. You might need the Windows 2000 Professional installation CD-ROM to install the language software.
5. Click the Set Default button. The Select System Locale dialog box opens.
6. Select the same language that you selected in step 4.
7. Click OK to close the Select System Locale dialog box and save the changes.
8. In the “Settings for the current user” area, select the same language that you selected in step 4.
9. Click OK to close the Regional Options dialog box and save the changes.

International Character Set Support

MediaNetwork contains support for international characters by migrating the MediaNetwork metadata from a multibyte character string (MBCS) encoding to the Unicode character encoding. This allows you to use international characters in your MediaNetwork folder and file names. When you install MediaNetwork on your File Manager, all of the folder and file names in your MediaNetwork workspaces will be converted to Unicode.

International characters can currently only be used for folder and file names. They cannot be used for computer names, user names, passwords, or workspace names.

Make sure that you follow the instructions for adding language support to the File Manager explained in “International Character Support for Windows 2000 or Windows XP Clients” on page 82. You can lose some or all of your data if you upgrade the File Manager before you install the language support.

European Languages

In MediaNetwork Release 3.1 and earlier, folder and file names for European languages (such as French, Italian, German, or Spanish) created by Macintosh and Windows clients using Avid Composer Products software used a character encoding (MacRoman) that *is not* native to the Windows operating system. Windows clients that used applications other than Avid Composer Products software created folder and file names using a character encoding (ANSI) that *is* native to the Windows operating system.

The MacRoman and ANSI character encodings function in the same manner for 7-bit ASCII characters (such as a–z, A–Z, and 0–9), but there are differences for characters outside the ASCII character set. They each contain characters that do not appear in the other encoding.

In MediaNetwork v3.2 and later, all Macintosh and Windows clients use the Unicode character encoding. This character encoding is common to both clients, but has differences from MacRoman and ANSI. For a list of characters that you need to check before upgrading to MediaNetwork v3.5, see the *Avid Unity MediaNetwork Version 3.3 Upgrade Notes*.

Asian Languages

In MediaNetwork Release 3.1 and earlier, folder and file names for Asian languages (such as Chinese or Japanese) created by Macintosh and Windows clients using Avid Composer Products software (after installing the Avid language kit) used a character encoding (such as ANSI Japanese) that *is* native to the Windows operating system. Macintosh clients that used applications other than Avid Composer Products software created folder and file names using a character encoding (such as Mac Japanese) that *is not* native to the Windows operating system.

Character encodings like these function correctly for 7-bit ASCII characters (such as a–z, A–Z, and 0–9), but there are differences for characters outside the ASCII character set. They each contain characters that do not appear in the other encoding.

In MediaNetwork v3.2 and later, all Macintosh and Windows clients use the Unicode character encoding. This character encoding is common to both clients, but has differences from the language specific character encodings. For a list of checks that you need to make before upgrading to MediaNetwork v3.5, see the *Avid Unity MediaNetwork Version 3.3 Upgrade Notes*.

Avid supplies two HTML files (MacRoman_not_in_ANSI.htm and ANSI_not_in_MacRoman.htm) with these release notes (in the Documents folder on the MediaNetwork CD-ROM). One lists ANSI characters that do not appear in the MacRoman character set. The other lists MacRoman characters that do not appear in the ANSI character set. These files will help you determine characters that might not convert properly during the MediaNetwork upgrade. You will need to set your Web browser to display Unicode characters to view these files.

When you use an Asian double-byte operating system, the following restriction applies: ***If you use ASCII characters to name bins, projects, tapes, or other Avid elements, use single-byte characters.*** *If you use double-byte characters, the characters might appear with extra space between them and the names might not be recognizable by other clients.*

Operating systems that use a double-byte character system usually allow the user to choose between single-byte ASCII characters or double-byte ASCII characters. If you have a choice, use single-byte characters when entering ASCII text.

Invalid Characters

Macintosh and Windows clients and some language kits allow and display characters in different ways. This can create problems as you share media among several clients with different operating systems. To minimize file sharing problems, you should observe the following recommendations:

- Create workspace names with no spaces, periods, or semicolons in their names. If you need to separate two words in a workspace name, use an underscore instead of a space or period.
- Create file and folder names that do not contain special characters (such as, ™, ®, or ©). Characters like these can cause the client or the File Manager to behave unpredictably.

Unsupported Characters

Do not use the Japanese Yen (¥) symbol in the ASCII character set. The client might convert the symbol to a backslash.

Do not use the Y-acute (ý or Ý) and Y-diaeresis (ÿ or Ÿ) characters. Some clients do not recognize the Y-acute character. Some clients might not display the Y-diaeresis character correctly.

Language Support

MediaNetwork workgroups can support only one language (such as French or Chinese) and ASCII characters. All clients connected to the workgroup *must* use the same language.

Normalization

All folder and file names are stored by the File Manager using the Unicode UTF-8 character set. As files and folders are requested by a client, the client converts their names from UTF-8 to a character set appropriate for the client. These character sets are:

- Windows clients convert to the UTF-16 character set.
- Mac OS 9 clients convert to the MacRoman character set.
- Mac OS X clients use the UTF-8 character set without any conversion.

Appendix C

Installing the MediaNetwork Billing Software

This appendix describes the procedures to install the MediaNetwork billing software.

Avid Unity MediaNetwork supports the ability to supply other applications, such as billing applications like ScheduALL, or databases, with information about storage usage. The MediaNetwork billing software runs on any Windows 2000 client and can be used with all MediaNetwork related products, MediaNetwork workgroups.

The billing software is a client/server application. The server periodically collects information about storage usage. The server creates a new file each day and labels the file with a unique name that contains the year, month, and day the file is created. The server must run on a Windows Fibre Channel client or the File Manager.

The log files have comma-separated values, and each line in the file contains the following information:

- Timestamp
- MediaNetwork File Manager name
- Workspace name
- Amount of allocated space
- Actual amount of space used
- Total number of folders in the workspace
- Total number of files in the workspace
- Indicator if the workspace is protected

The client software periodically retrieves the log files from the server and stores them for other applications. These files are stored in a location that is accessible by the other applications. As the client retrieves the file, it can purge files older than a specified number of days on the server.

The client software is also capable of retrieving the files in a manual mode. Using this method, you can manually retrieve new log files from the server. This can be useful if the client is a portable computer or other computer that is not always connected to the network.

The client software can retrieve log files from several MediaNetwork workgroups. This makes it easy to collect all the usage information in one location if your site has more than one environment.

The client software can be any Windows 2000 computer with an Ethernet connection to the server.

If your MediaNetwork workgroup has a Failover File Manager and you are installing the server software on the File Manager, you need to do the following:

- *Install the billing server software on both File Managers.*
- *Create a new workspace for storing the billing log files on the MediaNetwork storage. Placing the log files in this workspace allows both the active and failover File Managers access to the location at all times.*
- *Configure both File Managers to look for the log file on the MediaNetwork storage.*
- *Make this workspace available only to the user accounts on the server and client that need access to the workspace to write or copy the files.*

Installing the Billing Server Software

The billing server software *must* run on a MediaNetwork Windows Fibre Channel client or the File Manager.

To install the billing server software:

1. Locate the MediaNetwork CD-ROM.
2. Insert the CD-ROM into the server CD-ROM drive. The CD-ROM is set to start automaticall and open the Avid Unity Installation window.
3. Select Product Installers. The screen changes to show the available product installers.
4. Select Install Avid Unity Billing Services. The InstallShield Wizard opens, displaying the Welcome screen.
5. Accept the defaults until the Select Component screen appears.
6. Click the Server button, and continue accepting the defaults. The software is installed, and the InstallShield Complete screen appears.
7. Select “Yes, I want to restart my computer now.”
8. Click Finish to complete the software installation and to reboot the server.

Configuring the Billing Server Software

To configure the billing server software:

1. Click the Start button, and select Programs > Avid Unity > Avid Unity Billing Service. The Billing Server Configuration dialog box opens.
2. (Option) Type a new value for the polling interval (how often the log files are saved) in the Polling Interval text box. The minimum polling interval is 1 minute.

Setting a short polling time produces larger log files. Setting a long polling time produces shorter log files and means that fluctuations in storage usage are tracked less frequently.

3. (Option) Change the log folder location by typing a path to a new location in the Log Folder Location text box.

If you are using a MediaNetwork workspace to store the files, type a full Universal Naming Convention (UNC) path to the workspace using the following format:

```
\\virtualFMname\workspace
```

where virtualFMname *is the virtual File Manager name you established when you configured File Manager failover, and* workspace *is the name you assigned to the billing workspace.*

4. (Option) For security, type a password in the Password text box.

If you decide to use a password, write it down. You will need the password when you configure the client software.

5. If you enter a password, type the password a second time in the Confirm Password text box. If the text is not the same as the text you typed in the Password text box, you are prompted to type the password again.

Installing the Billing Client Software

To install the billing client software:

1. Locate the MediaNetwork CD-ROM.
2. Insert the CD-ROM into the client CD-ROM drive. The CD-ROM is set to start automatically and open the Avid Unity Installation window.
3. Select Product Installers. The screen changes to show the available product installers.
4. Select Install Avid Unity Billing Services. The InstallShield Wizard opens, displaying the Welcome screen.
5. Accept the defaults until the Select Component screen appears.
6. Click the Client button, and continue accepting the defaults. The software is installed, and the InstallShield Complete screen appears.
7. Select “Yes, I want to restart my computer now.”
8. Click Finish to complete the software installation and to reboot the server.

Configuring the Billing Client Software

To configure the billing client software:

1. Click the Start button, and select Programs > Avid Unity > Avid Unity Billing Service. The Billing Server Configuration dialog box opens.
2. (Option) To change the location where the log files will be stored on the client, click the Edit button for the Data Output Folder and type a path to a new location, or click the Browse button to navigate visually to a new location.
3. Click the Add button in Avid Unity Clusters. The Add Avid Unity to List dialog box opens.
4. Type a nickname for the MediaNetwork billing server in the Unity Nickname text box. This will help identify the log files later. If you have several MediaNetwork workgroups, select a nickname that will help you to quickly identify the billing server for each environment.
5. (Option) Change the time interval for collecting the files in the Automatic Retrieval of Usage Information area by clicking the up and down arrows next to the Minutes scroll list.
6. Type the IP address or Computer Name for the billing server in the Primary Server IP Address text box.
7. If you set a password on the billing server, type the password in the Primary File Manager Password text box.
8. Confirm the password by typing it again in the adjacent Retype Password to Confirm text box.
9. If you have more than one billing server, type the IP address or Computer Name for the second billing server in the Secondary Server IP Address text box.
10. If you set a password on the billing server, type the password in the Secondary File Manager Password text box.
11. Confirm the password by typing it again in the adjacent Retype Password to Confirm text box.
12. (Option) To purge older log files from the server, select “When getting files, purge logs from the server that are older than XX days” in the Purge of Old Usage Logs area.

13. Adjust the number of days by clicking the up and down arrows next to the Days scroll list.
14. Configure your third-party billing or other application software to import the log files.

Dates and times are important to collecting accurate usage log information. Make sure your server and client have a matching date and time set before running the Avid billing application client and server.

Appendix D

Using the Product Recovery CD-ROM

This appendix describes the procedures to recover your MediaNetwork File Manager if you need to reinstall Windows 2000.

This procedure restores only the Windows 2000 operating system and the hardware drivers. It does not restore the MediaNetwork software. The MediaNetwork software must be reinstalled separately, after the operating system recovery is complete.

You might need to reinstall the Windows 2000 operating system on your File Manager if you are directed to do so by Avid Customer Support or if you are initializing your File Manager on a new drive. The reinstallation offers you two options:

- Perform a Windows 2000 installation to the *entire* drive (C: and D:). This replaces all the data from all the available partitions on your File Manager. You can perform this operation if you are initializing your File Manager.
- Perform a Windows 2000 installation to the *first partition* (C:). This removes the data in the C: partition only; the D: partition is not changed. You can perform this operation to replace only the operating system on your File Manager.

Reinstalling the Windows 2000 Operating System

To reinstall the Windows 2000 operating system from the Avid Product Recovery CD-ROM:

1. Make sure to unmount any workspaces the clients have mounted.
2. Stop the Connection Manager.
3. Use the Monitor Tool to stop the File Manager.

Make sure all Fibre Channel connections are disconnected at the rear of the File Manager by removing all Fibre Channel cables before continuing.

4. Locate the Avid Unity File Manager Product Recovery CD.
5. Insert the Avid File Manager Product Recovery CD-ROM into the File Manager CD-ROM drive.
6. Click the Start button, and select Shut Down. The Shut Down Windows dialog box opens.
7. Select Shut down, and click OK. The Windows 2000 operating system shuts down and turns off the File Manager.
8. Disconnect all the Ethernet network cables.
9. Press the Power button on the front of the File Manager. The system starts to boot normally and then presents the File Manager Product Recovery CD-ROM screen. This takes approximately 2 minutes.

If the File Manager does not boot from the CD-ROM, change the boot priority for the CD-ROM drive to place it before the hard drive. Reboot the File Manager, use Setup at the beginning of the boot process (press F2 when prompted) to make the change, and then repeat step 7.

10. Select one of the available options:
    - Recover the C: partition only.
    - Recover both the C: and D: partitions.
    - Exit without doing a recovery.

11. At the prompt, type the number of the operation you want to perform:
    - If you type **1** or **2**, a warning screen appears, informing you that you are about to recover the Windows 2000 operating system. Continue with step 12.
    - If you type **3**, the recovery quits and displays the DOS prompt A:.
12. When a caution screen appears, informing you again that you are about to recover the Windows 2000 operating system, do one of the following:
    - Press any key, and continue with step 13.
    - Press Ctrl+C to quit the recovery.
13. When a final caution screen appears, informing you again that you are about to recover the Windows 2000 operating system, do one of the following:
    - Press Y to continue. The Ghost® screen appears showing the progress of the operating system recovery. This takes approximately 10 minutes. Continue with step 14.
    - Press N to quit the recovery.

    A screen appears, informing you the recovery is complete. It also shows the versions of the ATTO™ driver that were installed.
14. Write down the versions of the ATTO driver that appear in the message. You will need these version numbers later.
15. Remove the Avid File Manager Product Recovery CD-ROM from the CD-ROM drive.
16. Press Ctrl+Alt+Delete to reboot the File Manager and start the new Windows 2000 operating system.

The Windows 2000 operating system recovery is complete. Configure the operating system as described in the following section.

Configuring the File Manager Using Windows 2000 Setup

After you recover the Windows 2000 operating system, it runs the Windows 2000 Setup utility to set several Windows operating system parameters. You'll need to have the Windows software kit available when you run the utility. It contains the Windows license number you need to type as part of the configuration.

To set up the Windows operating system:

1. If you are not coming from Step 16 in "Reinstalling the Windows 2000 Operating System" on page 94, reboot the File Manager. The Windows 2000 Setup utility starts, and the Windows 2000 Server Setup dialog box opens showing the License Agreement screen.
2. Select "I accept the agreement" to accept the license.
3. Click Next. The Regional Settings screen appears.
   - If you are outside the United States, customize the system and local settings, and the keyboard for your location.
   - If you are in the United States, continue with step 4.
4. Click Next. The Personalize Your Software screen appears.
5. Type the system administrator's name in the Name text box.
6. Type the company name in the Organization text box.
7. Click Next. The Your Product Key screen appears.
8. Type the Product Key from the Certificate of Authenticity in the Product Key text box. The certificate might be on the back of the *Windows 2000 Server Getting Started Guide* in the Windows software kit, or it might be affixed to the File Manager.

   If the certificate is not already affixed to the File Manager, remove it from the *Windows 2000 Server Getting Started Guide* and affix it.
9. Click Next. The Computer Name and Administrator Password screen appears.
10. Type the name you want to use for the File Manager in the Computer Name text box.

Avid recommends you use an administrator password to prevent unauthorized use of the Administrator account.

11. Type the password you want to use for the administrator account in the Administrator Password text box.
12. Retype the password in the Confirm Password text box.
13. Click Next. The Date and Time Settings screen appears. Set the correct date, time, and time zone for the File Manager.
14. Select “Automatically adjust clock for daylight saving changes” if your location observes daylight saving time.
15. Click Next. The Network Settings screen appears.
16. Select Typical. The network settings are site dependent and will be set later during the File Manager configuration.
17. Click Next. The Workgroup and Computer Domain screen appears.
18. Click No. The workgroup and domain settings are site dependent and will be set later during the File Manager configuration. The Performing Final Tasks screen appears, followed by the Complete the Windows 2000 Setup Wizard screen.
19. Click Finish. The Windows 2000 operating system loads and the Network Identification Wizard appears.
20. Click Cancel.
21. Log on as System Administrator.
22. Click the Start button, and select Shut Down. The Shut Down Windows dialog box opens.
23. Select Shut down, and click OK. The Windows 2000 operating system shuts down and turns off the File Manager.
24. Reconnect all the Ethernet network and Fibre Channel cables.
25. Boot the File Manager system.

Appendix E

File Manager Troubleshooting

This appendix describes the procedure needed to troubleshoot the SR 2400 File Manager when necessary.

For more troubleshooting techniques and procedures, see the Avid Unity MediaNetwork Troubleshooting Guide.

The System Status LED on the front of the SR 2400 File Manager might flash yellow. This indicates a noncritical error with the SR 2400 File Manager hardware. The error is written into the System Event Log.

A noncritical error is a problem with any of the following:

- Temperature, voltage, or fan noncritical threshold crossing
- A chassis intrusion
- A Set Fault Indication command from the system BIOS

When the System Status LED is flashing, contact Avid Customer Support to diagnose the problem and determine if replacement parts are necessary. They can advise you on how to read the System Event Log. After Avid Customer Support has determined the reason for the error, you can clear the System Event Log and reboot the File Manager.

To clear the File Manager System Event Log:

1. At the beginning of a system boot, press the F2 key to enter Setup.
2. Press the Right Arrow key until you reach Server.
3. Press the Down Arrow key until you reach Event Log Configuration.
4. Press Enter. This selects Clear All Event Logs.
5. Press Enter.

6. Press the Down Arrow key until you reach Yes.
7. Press Enter.
8. Press the Escape key.
9. Press the Right Arrow key until you reach Exit. This selects Exit Saving Changes.
10. Press Enter.
11. Press Enter to accept Yes. The File Manager reboots.

Appendix F

Configuring a DNS Server

If you do not have a DNS server, this appendix will help you to create one. Since the an Xdeck requires a workgroup environment with a Domain Name System (DNS) server, this is used an an example. Most workgroups already have a DNS server.

The procedures in this appendix describe how to create a DNS server by using the Control Panel:

- If you understand the function of a DNS server and need to create one, see "Configuring the DNS Server" on page 108.
- If you do not understand the function of a DNS server, see "Understanding DNS" on page 102 and review the DNS networking concepts.

Avid recommends that you consult a network administrator with DNS experience if you are not comfortable with the information in this appendix.

Understanding DNS

The following sections explain some standard networking terminology.

IP Addressing

Every computer on a Transmission Control Protocol/Internet Protocol (TCP/IP) network must have an Internet Protocol (IP) address, which uniquely identifies the computer to the rest of the network. Every transmission sent by computers contains the system IP address of its final destination. However, IP addresses can contain up to 12 digits and are difficult for users to associate with specific computers. Imagine browsing the Web and having to remember that http://192.168.130.014 is the URL for the Web site. It is easier to remember and type http://www.*companyname*.com.

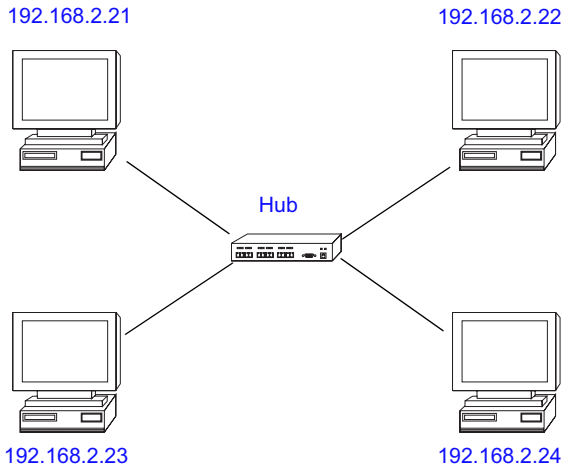


Figure 1 IP Addressing Diagram

DNS Naming

URLs are based on names provided by the DNS. DNS is essentially a distributed database that contains user-friendly names for the computers on a network and their equivalent IP addresses. TCP/IP clients that have access to a DNS server can substitute DNS names in place of IP addresses in applications like Web browsers and File Transfer Protocol (FTP) clients.

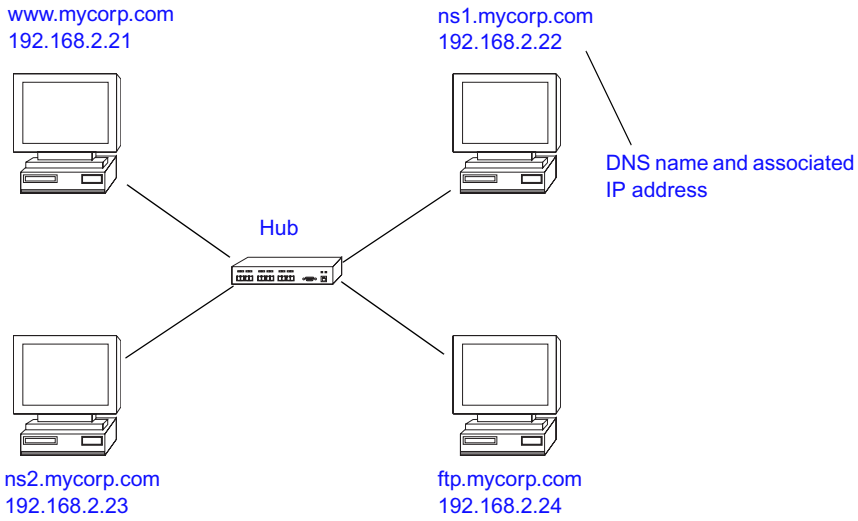


Figure 2 DNS Name and Associated IP Address Diagram

Name Resolution

The process of converting a DNS name into an IP address is called *name resolution*. When you type a DNS name into a Web browser, the first thing the application does is send a query containing the name to its DNS server. The server then responds with the IP address associated with that name. The browser can then transmit its URL request directly to the Web server, using the IP address. Once the DNS name is resolved, the browser uses only the IP address to communicate with the Web server.

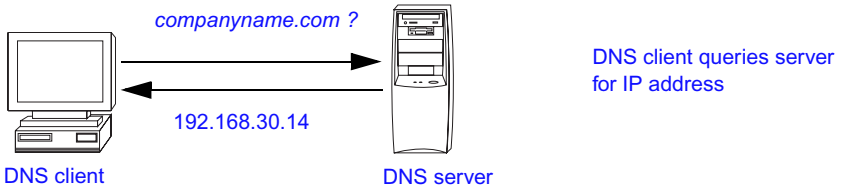


Figure 3 Name Resolution Diagram

DNS Server Access

To use DNS names, every system on a TCP/IP network must have access to a DNS server. The server can be located on the local area network (LAN), or it can be provided by an Internet service provider (ISP). Each system on your network is configured with the IP address of one or more DNS servers when you supply the TCP/IP client with the client's IP address, subnet mask, and other settings. You can configure the TCP/IP clients manually, or by using a Dynamic Host Configuration Protocol (DHCP) server.

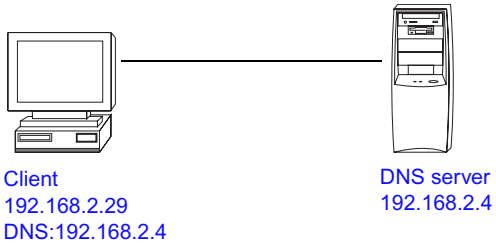


Figure 4 DNS Server Access Diagram

DNS Data Distribution

The Internet is the single largest TCP/IP network in existence, consisting of millions of computers, but it would not be practical to use a single server to maintain a complete list of the DNS names for all those machines. To support a network this large, the DNS database is distributed among thousands of servers located all over the world. The owner of a domain name, is responsible for maintaining an authoritative DNS server that contains the records for that domain.

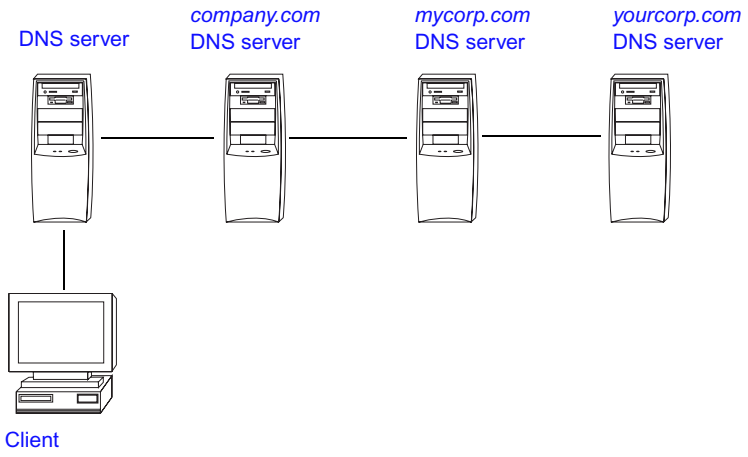


Figure 5 DNS Data Distribution Diagram

DNS Referrals

When a client on the network attempts to resolve a name in a particular domain, the request message is referred to the authoritative server for that domain. This is possible because DNS servers communicate with each other by transmitting the name resolution requests they receive from their clients to other DNS servers. The IP address for the requested name is eventually supplied to the client's original DNS server, which returns it to the client.

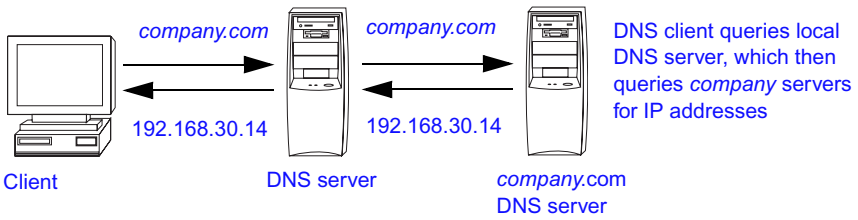


Figure 6 DNS Referral Diagram

Top Level DNS Servers

The core servers of the Internet are the authority for top level domains like .com, .net, and .org. These servers maintain the records listing the authoritative servers for second level domains. A request from a DNS server for a name in an unknown domain is referred to the appropriate core server, which supplies the address of the authoritative server for that domain. The request then goes to the authoritative server. It replies with the IP address for the requested name.

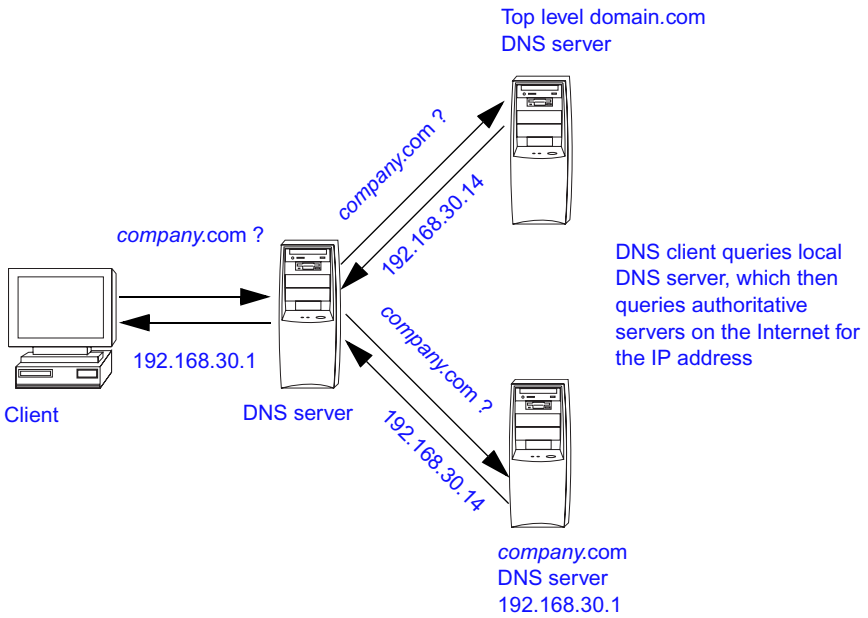


Figure 7 Top Level DNS Server Diagram

Windows 2000 and DNS

A Windows NT server includes a DNS server primarily to support Internet access for Windows network clients. Windows 2000 is much more dependent on DNS. Active Directory uses DNS servers to maintain records for each domain controller on the network, and Windows clients use DNS queries to locate the nearest domain controller. Because Microsoft's DNS Server includes features required by AD, you need to run a Microsoft DNS Server on your network if you use Active Directory.

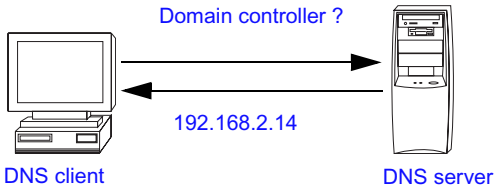


Figure 8 Domain Controller Diagram

Configuring the DNS Server

Perform the following procedure to configure a DNS server on your MediaManager server.

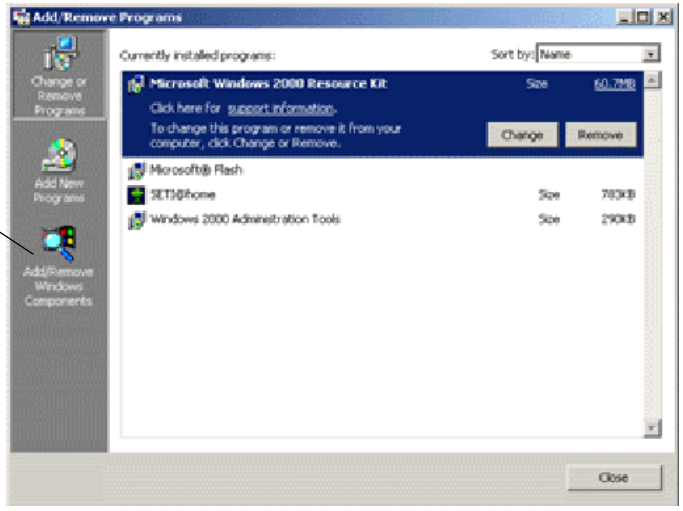
To configure a DNS server:

1. Click the Start button, and select Settings > Control Panel.

   The Control Panel window opens.

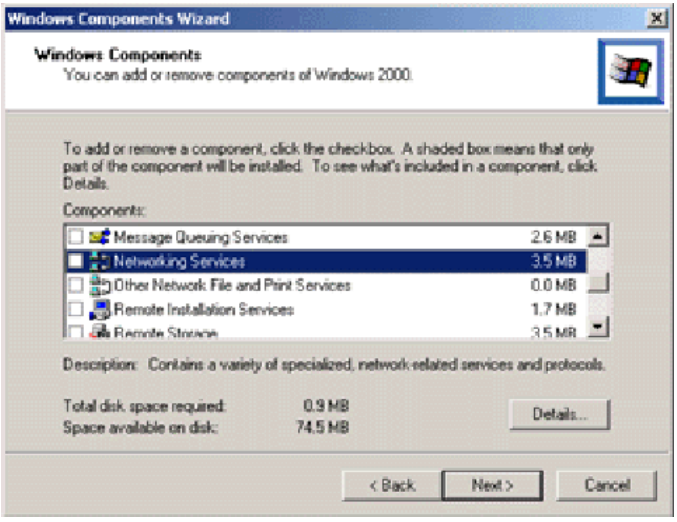
2. Double-click Add/Remove Programs.

   The Add/Remove window opens.



3. Double-click the Add/Remove Window Components icon.

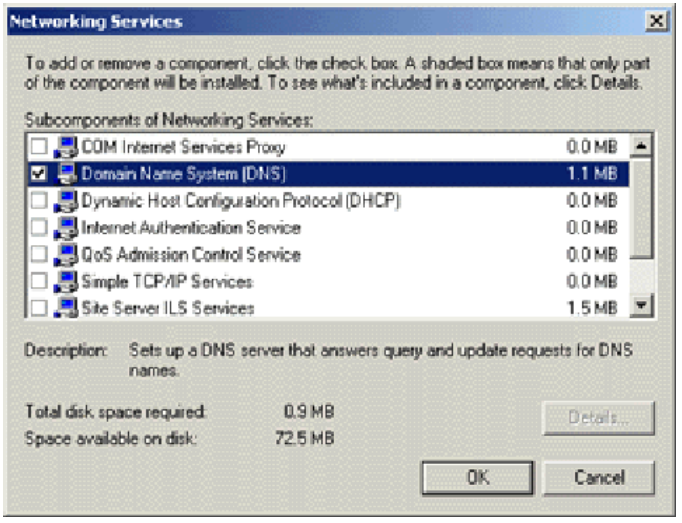
   The Window Component Wizard dialog box opens.


Windows Components Wizard
Windows Components
You can add or remove components of Windows 2000.
To add or remove a component, click the checkbox. A shaded box means that only part of the component will be installed. To see what's included in a component, click Details.
Components:
Message Queuing Services
2.6 MB
Networking Services
3.5 MB
Other Network File and Print Services
0.0 MB
Remote Installation Services
1.7 MB
Description: Contains a variety of specialized, network-related services and protocols.
Total disk space required:
0.9 MB
Space available on disk:
74.5 MB
Details...
< Back
Next >
Cancel

4. Highlight Networking Services. Do not select the check box.

5. Click Details.

   The Networking Services dialog box opens.


Networking Services
To add or remove a component, click the check box. A shaded box means that only part of the component will be installed. To see what's included in a component, click Details.
Subcomponents of Networking Services:
COM Internet Services Proxy 0.0 MB
Domain Name System (DNS) 1.1 MB
Dynamic Host Configuration Protocol (DHCP) 0.0 MB
Internet Authentication Service 0.0 MB
QoS Admission Control Service 0.0 MB
Simple TCP/IP Services 0.0 MB
Site Server ILS Services 1.5 MB
Description: Sets up a DNS server that answers query and update requests for DNS names.
Total disk space required: 0.9 MB
Space available on disk: 72.5 MB
Details...
OK
Cancel

6. Select the Domain Name System (DNS) check box in the Subcomponents of Networking Services list.
7. Click OK to return to the Window Components Wizard window.
8. Click Next.

   The installation process begins and you might be prompted to supply the Windows 2000 Server distribution files.

9. Click Finish.
10. Restart the system.

Configuring the DNS Console

To configure the DNS console:

1. Click the Start button, and select Programs > Administrative Tools > DNS.

   The DNS console window opens.

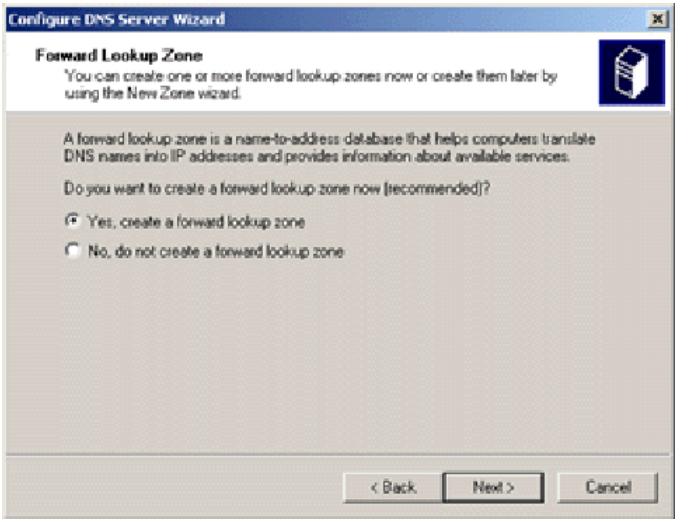
2. Highlight the DNS server in the console Tree pane and select Action > Configure the Server.

   Before clients can use the server, it must be configured to have at least one zone. A *zone* is an administrative unit within a DNS server that consists of all or part of a given domain. When you register a domain, like *mycorp.com*, you own that name and the right to create as many subdomains within it, such as *paris.mycorp.com* or *sales.mycorp.com*. You can create a zone out of any continuous branch of the domain Tree, separating the DNS functions for the domain into discrete segments.

   The DNS server includes a Configure DNS Server Wizard that takes you through the process of creating one forward lookup zone and one reverse lookup zone.

3. Click Next in the Configure DNS Server Wizard Welcome window.

   The Forward Lookup Zone window opens.


Configure DNS Server Wizard
Forward Lookup Zone
You can create one or more forward lookup zones now or create them later by using the New Zone wizard.
A forward lookup zone is a name-to-address database that helps computers translate DNS names into IP addresses and provides information about available services.
Do you want to create a forward lookup zone now [recommended]?
Yes, create a forward lookup zone
No, do not create a forward lookup zone
< Back
Next >
Cancel

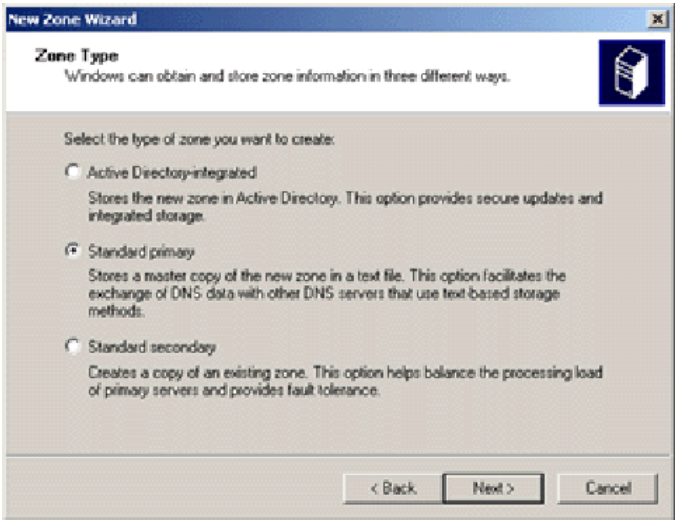
4. Specify whether or not you want to create a forward lookup zone.

   A *forward lookup zone* is a database containing DNS names and their equivalent IP addresses, which is organized so that the server can easily look up an IP address when given a name. You must have at least one zone on your DNS server.

   - Select Yes, if you need to create a Zone.
   - Select No, if you have at least one Zone already.

5. Click Next.

   The Zone Type window opens.

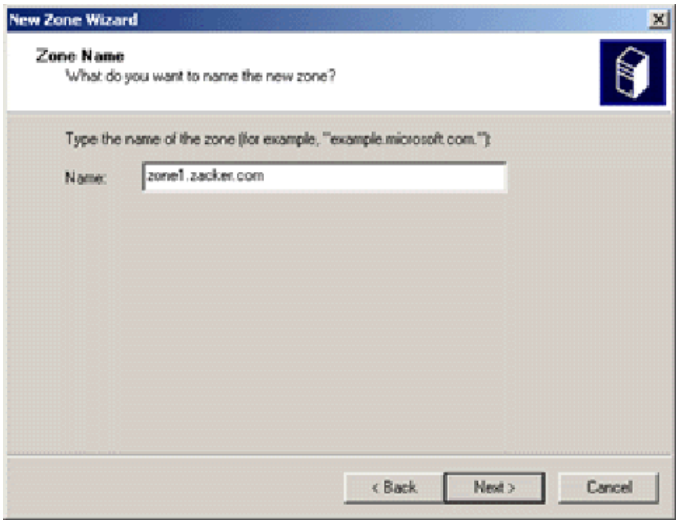

New Zone Wizard
Zone Type
Windows can obtain and store zone information in three different ways.
Select the type of zone you want to create:
Active Directory-integrated
Stores the new zone in Active Directory. This option provides secure updates and integrated storage.
Standard primary
Stores a master copy of the new zone in a text file. This option facilitates the exchange of DNS data with other DNS servers that use text-based storage methods.
Standard secondary
Creates a copy of an existing zone. This option helps balance the processing load of primary servers and provides fault tolerance.
< Back
Next >
Cancel

6. Select which type of zone you want to create:

   - **Active Directory-Integrated** zone stores the DNS data in the AD database and configures the server to host a Windows 2000 network. Select this type if you are running AD on your network.
   - **Standard primary** zone (Avid recommended) is used solely for Internet name resolution, and does not provide Active Directory support.
   - **Standard secondary** zone is a replica of a zone on another DNS server; it is created for fault tolerance and load balancing purposes.

7. Click Next.

   The Zone Name window opens.

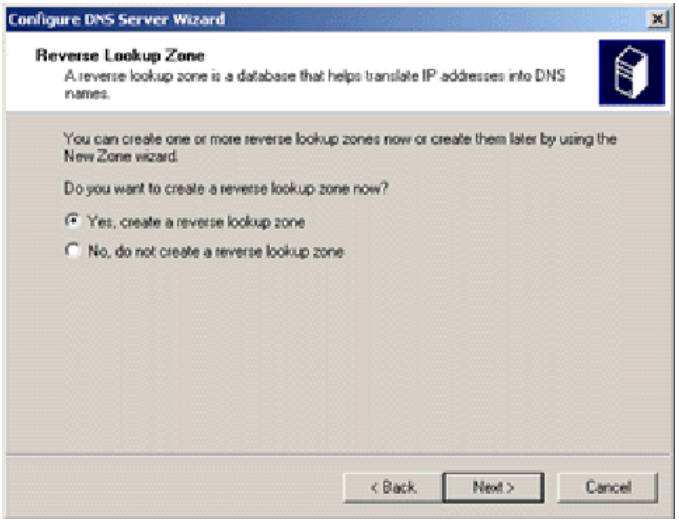


8. Specify a name for the new zone you are creating, for example: *xdeckdns.com*
9. Click Next.

   The Zone File window opens.
10. Select “Create a new file with this name.”

11. Click Next.

    After the wizard creates a forward lookup zone, it prompts you to create a reverse lookup zone.


Configure DNS Server Wizard
Reverse Lookup Zone
A reverse lookup zone is a database that helps translate IP addresses into DNS names.
You can create one or more reverse lookup zones now or create them later by using the New Zone wizard.
Do you want to create a reverse lookup zone now?
Yes, create a reverse lookup zone
No, do not create a reverse lookup zone
< Back
Next >
Cancel

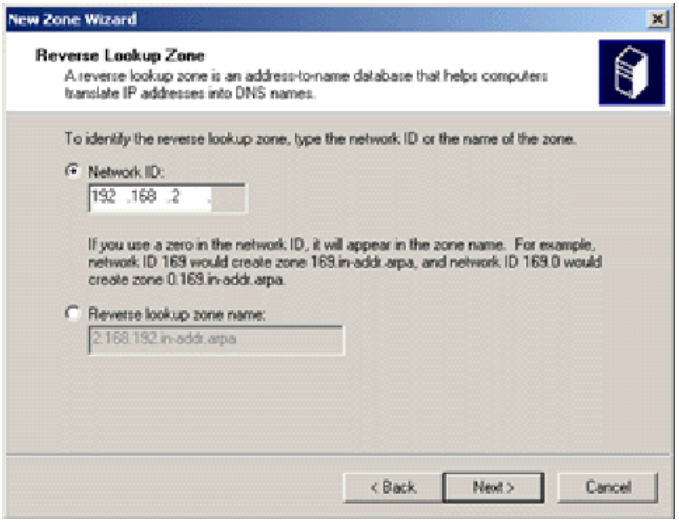
    A *reverse look up zone* organizes its data by IP address, enabling the server to resolve an address into the appropriate name. The process of creating a reverse lookup zone is very similar to that of creating a forward lookup zone.

12. Select Yes, to create a reverse lookup domain.
13. Click Next.
14. Select the zone type from the same three options provided in step 6.

    Avid recommends Standard Primary (default).

15. Click Next.

    The Reverse Lookup Zone window opens.


New Zone Wizard
Reverse Lookup Zone
A reverse lookup zone is an address-to-name database that helps computers translate IP addresses into DNS names.
To identify the reverse lookup zone, type the network ID or the name of the zone.
Network ID:
192 .168 .2
If you use a zero in the network ID, it will appear in the zone name. For example, network ID 169 would create zone 169.in-addr.arpa, and network ID 169.0 would create zone 0.169.in-addr.arpa.
Reverse lookup zone name:
2.168.192.in-addr.arpa
< Back
Next >
Cancel

16. Enter the network ID for the reverse lookup zone you are creating.

    DNS performs reverse (address-to-name) lookups by creating a domain called in-addr.arpa with subdomain names using the decimal numbers of the IP address.

    For example, the network ID 192.168.2 would translate to a reverse lookup domain of 2.168.192.in-addr.arpa. The numbers are reversed in the domain name because DNS names run from right to left and IP addresses run from left to right.

17. Click Next.
18. Click Next.
19. Click Finish.

    Once the process is completed, you can create additional zones or resource records within the zones.

Creating a Host Record

To create a Host record:

1. Click the Start button, and select Programs > Administrative Tools > DNS.

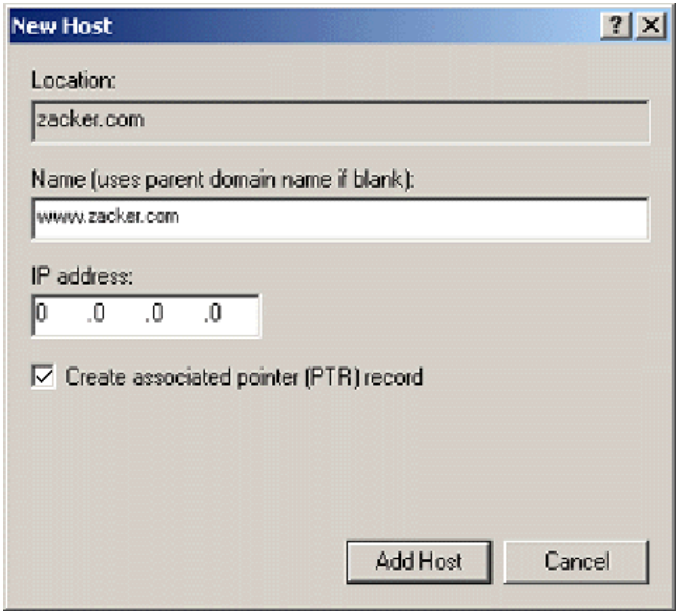
   The DNS console window opens.

2. Highlight the Zone in which you want to create the new host record in the console Tree pane. For example, in the Tree pane highlight:

   servername > Forward *name* > *XdeckDNS.com*

3. Select Action > New Host.

   The New Host dialog box opens.



DNS data is stored in resource records, of which there are many different types. The host (A) record is the most basic resource record; it is used to map the fully qualified domain name (FQDN) of a computer to its IP address. When a client sends a name resolution request to a DNS server, the server accesses the host record with the specified name and retrieves the IP address.

4. Add, at a minimum, entries for the MediaManager and PortServers that will be used by the installed Xdeck systems.
5. Enter the host name of the computer to be represented by the host record in the Name text box of the New Host dialog box.

   The console adds the domain name associated with the zone to create the FQDN, for example:

   PortServerName
6. Enter the IP address of the computer with the specified host name in the IP address text box of the New Host dialog box, for example:

   192.168.1.10
7. Select the “Create associated pointer (PTR) record” option to automatically create the equivalent PTR record for the host. (Avid recommends that you create a PTR, but this step is not required.)

Avid recommends that you create an inverse PTR resource record (a reverse lookup) of a host record. While a host record maps an FQDN to an IP address, a PTR record maps the IP address to the FQDN, using the in-addr.arpa domain structure.

8. Click Add Host.

   After you clear the message box that informs you that the host record has been created, you can see the new object in the zone you selected.
9. Repeat steps 4 to 7 for each PortServer Pro and Xdeck system (other clients are optional).

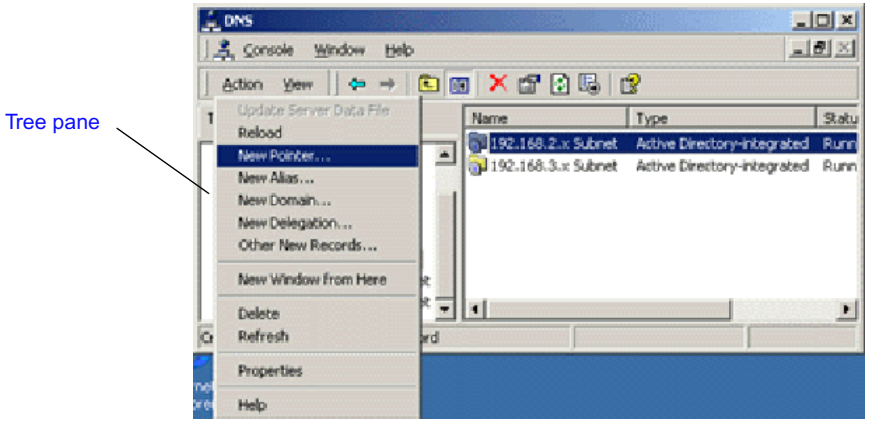
Creating an Associated Pointer Record

If you selected the “Create associated pointer (PTR) record” option in step 6 of “Creating a Host Record” on page 116, configure the PTR as follows.

To configure a PTR:

1. Click the Start button, and select Programs > Administrative Tools > DNS

   The DNS console window opens.

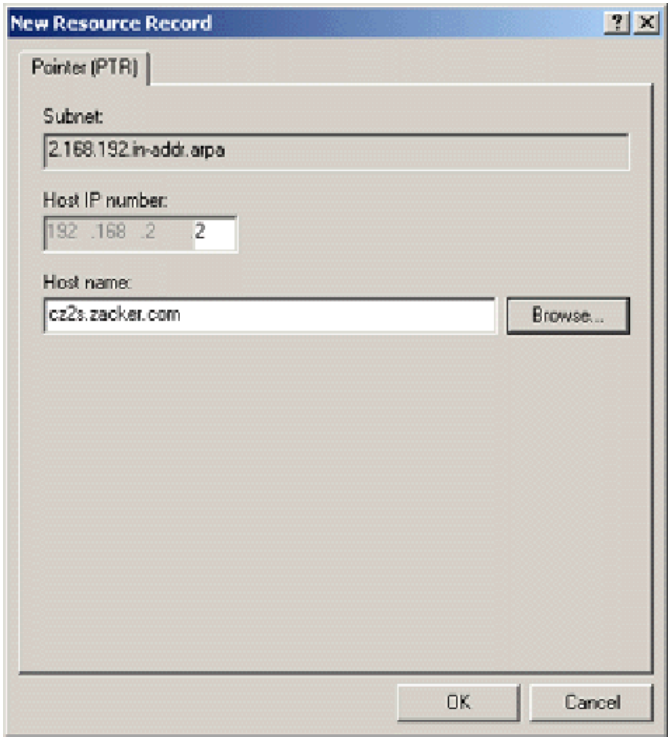


2. Highlight the zone in which you want to create the new PTR record in the console Tree pane.

   The PTR records are used to map IP addresses to FQDNs. You must select a zone in the console’s Reverse Lookup Zones container.

3. Select Action > New Pointer.

   The New Resource Record dialog box opens.



4. Specify the host ID part of the system's IP address in the New Resource Record dialog box's Host IP Number text box.
5. Enter the host name of the system represented by the PTR record, or click the Browse button and select a host record from the DNS display.
6. Click OK to create the new record and return to the DNS console window.

Configuring the PortServer Pro and the Xdeck for the DNS Server

Once you have the DNS server configured, you will need to enter DNS information for each PortServer Pro and Xdeck system. You can also configure other clients in your Avid Unity MediaNetwork network.

To configure the PortServer Pro for the DNS server:

1. Click the Start button, and select Settings > Network and Dialup Connections.
2. Right-click the active *network adapter* and select Properties.
3. Click Internet protocol TCP/IP.
4. Click Properties.
5. Select “Use the following DNS Server addresses” and type in the IP address of the DNS Server (preferably the MediaManager) in the Preferred DNS Server text box.
6. Click Advanced.
7. Click the DNS tab.
8. Select “Append these DNS suffixes (in order).”
9. Click Add and type in the DNS Name you specified, for example:

   xdeckdns.com
10. Click Add.
11. Click OK and close all open windows.

To configure the Xdeck for the DNS server:

- Specify the DNS settings on each Xdeck:
  a. Start your Web browser.
  b. Enter the Xdeck home page address.
  c. Click the Configuration tab.
  d. Type the DNS server IP address and the DNS domain name in the DNS Settings section.

e. Click Configure.

f. Power cycle the Xdeck

.

Appendix G

Regulatory and Safety Notices

Warnings and Cautions

Never install equipment if it appears damaged.

Disconnect the power cord before servicing unit.

Only perform the services explicitly described in this document. For services or procedures not outlined in this document, speak with authorized Avid service personnel.

Follow all warnings and cautions in the procedures.

Operate the device within its marked electrical ratings and product usage instructions.

FCC Notice

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment

generates, uses, and can radiate radio frequency energy and, if not installed in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Canadian ICES-003

This Class A digital apparatus meets all requirements of the Canadian Interference Causing Equipment Regulations.

Cet appareil numérique de la classe A respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

European Union Notice

Declaration of Conformity (According to ISO/IEC Guide 22 and EN 45014)

Application of Council Directives:	73/23/EEC, 89/336/EEC.
Standards to which Conformity is Declared:	EN60950:1999 Third Edition CISPR 22:1997 / EN55022:1994 + A1:1995 + A2:1997 Class A EN55024:1998/EN61000 — 3-2, 4-2, 4-3, 4-4, 4-5, 4-6, 4-11
Manufacturer's Name:	Avid Technology, Inc. 1925 Andover Street Tewksbury, MA 01876, USA
European Contact:	Nearest Avid Sales and Service Office or Avid Technology International B.V. Sandyford Business Center Unit 3, Dublin 18, Ireland
Type of Equipment:	Information Technology Equipment

Product Name:	Products for the Windows NT, Windows 2000, or Windows XP Operating System: Avid Adrenaline DNA, Avid DS Nitris DNA, Avid Equinox Break-Out-Box, Avid|DS, Avid Xpress, Avid Xpress DV, Film Composer, Media Composer, MediaDock 2+, MediaDock LVD, MediaDrive, MediaRAID, MEDIArray, MEDIArray Drive, MEDIArray II, MEDIArray II Drive, Meridien I/O box, NewsCutter, NewsCutter DV, NewsCutter XP, Pro Tools AVoption|V10, Symphony Products for the Mac OS X Operating System: Avid Adrenaline DNA, Avid Xpress, Avid Xpress DV, Film Composer, Media Composer, MediaDock 2+, MediaDock LVD, MEDIArray ZX, MediaDrive, MediaRAID, MEDIArray, MEDIArray Drive, MEDIArray II, MEDIArray II Drive, Meridien I/O box, Pro Tools AVoption|V10, Symphony Products for the UNIX Operating System: AirPlay, VideoSPACE Products for MediaNetwork and Workgroups: Avid ProEncode, Avid Unity MediaManager, Avid Unity MediaNetwork, Avid Unity TransferManager, LANserver, LANserver EX, MEDIArray, MEDIArray Drive, MEDIArray II, MEDIArray II Drive, Nearchive, PortServer, Xdeck
Base Model Numbers:	None
Product Options:	All
Year of Manufacture:	2004

(1) Products for the Windows NT, Windows 2000, or Windows XP Operating System: products were tested in a typical Avid Adrenaline DNA, Avid DS Nitris DNA, Avid Equinox Break-Out-Box, Avid|DS, Avid Xpress, Avid Xpress DV, Film Composer, Media Composer, MediaDock 2+, MediaDock LVD, MediaDrive, MediaRAID, MEDIArray, MEDIArray Drive, MEDIArray II, MEDIArray II Drive, MEDIArray ZX, Meridien I/O box, NewsCutter, NewsCutter DV, NewsCutter XP, Pro Tools AVoption|V10, or Symphony configuration.

(2) Products for the Mac OS X Operating System: products were tested in a typical Avid Adrenaline DNA, Avid Xpress, Avid Xpress DV, Film Composer, Media Composer, MediaDock 2+, MediaDock LVD, MediaDrive, MediaRAID,

MEDIArray, MEDIArray Drive, MEDIArray II, MEDIArray II Drive, MEDIArray ZX, Meridien I/O box, Pro Tools AVoption|V10, or Symphony configuration.

(3) Products for the UNIX Operating System: products were tested in an AirPlay or VideoSPACE configuration.

(4) Products for MediaNetwork and Workgroups: products were tested in a typical Avid ProEncode, Avid Unity MediaManager, Avid Unity MediaNetwork, Avid Unity TransferManager, LANserver, LANserver EX, MEDIArray, MEDIArray Drive, MEDIArray II, MEDIArray II Drive, MEDIArray ZX, Nearchive, PortServer, or Xdeck configuration.

I, the undersigned, hereby declare that the equipment specified above conforms to the above Directives and Standards.

George R. Smith, Director of Hardware Engineering

Australia and New Zealand EMC Regulations

N1709

John Kells, Australian Operations Manager
Avid Technology (Australia)
Unit B
5 Skyline Place
French Forest NSW 2086
Australia
Phone: 61-2-8977-4800

Taiwan EMC Regulations

Taiwan EMC Regulations BSMI Class A EMC Warning

警告使用者:
這是甲類的資訊產品，在居住的環境中使用時，可能會造成射頻干擾，在這種情況下，使用者會被要求採取某些適當的對策。

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